



City of Salford

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1949

BY

J. L. BURN, M.D., D.Hy., D.P.H.,

MEDICAL OFFICER OF HEALTH



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Members of the Health Committee,

1949.

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Councillor G. H. GOULDEN, J.P., *Deputy-Chairman*.

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Non-Medical Supervisor of Midwives Miss E. R. Entwistle, S.R.N., S.C.M.,
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Senior Mental Health Visitor and
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Health Education Officer H. L. LATHAM, C.R.S.I.

SOCIAL WELFARE INCLUDING DOMESTIC HELP.

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INTRODUCTION

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

Mr. Chairman, Ladies and Gentlemen.

“ We used to think that the millenium in public health would come about by perfect control of hygiene alone. . . . But in recent years the personal side of public health has come back to occupy the mind of the sanitarians. The health of a community is intimately bound up with BOTH aspects, and public health work is passing through a phase of expansion. Upon the broadmindedness and the VISION of our local authorities depends the future health of our people.”

G. G. C. M'GONIGLE.

Health services minister to the needs of the people—and everything depends on people. It is our policy to pay particular attention to the personal health services and this report recounts in its pages much of the interest you have shown in the health of mother and child, in the old folk at home, and indeed of the whole family.

The duties imposed upon Local Health Authorities by the National Health Service Act, 1946, as well as those devolving upon the Local Sanitary Authority under the Public Health Acts, the Housing Acts, etc., are largely personal in character—in fact, their operation impinges at some point or other during his life upon the health and welfare of every member of the community. The following pages, therefore, relate to activities of an exceedingly large variety which have affected individuals living in this City during the year 1949.

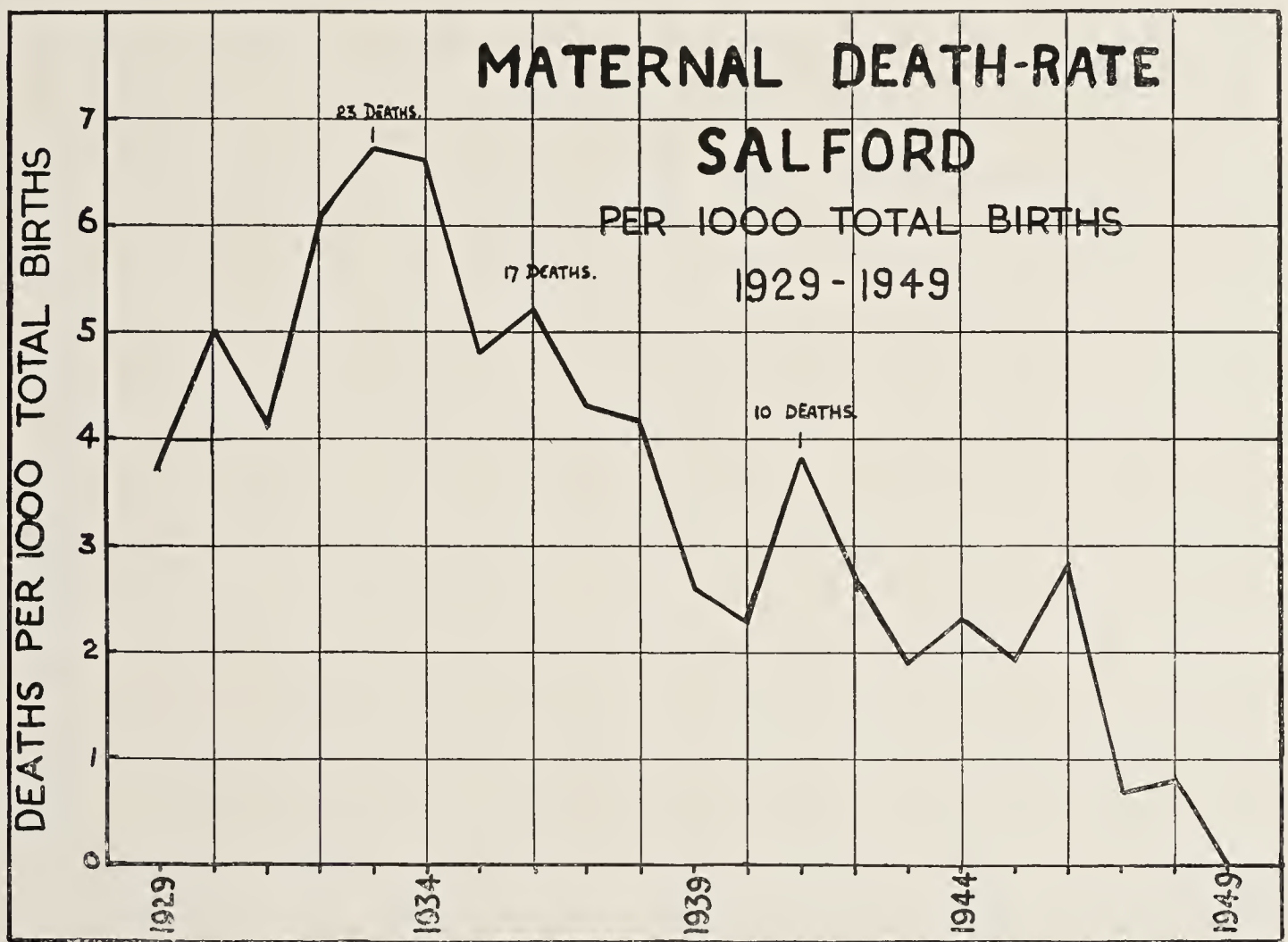
It is only necessary to mention such matters as the health of mothers and babies, the condition of the homes of the people, the prevention of illness by such means as vaccination against smallpox, and immunisation against diphtheria, apart from the thousand and one other activities undertaken by the Health Committee to realise how closely the Local Health Services affect the lives of the citizens of Salford. It has been the constant endeavour of your Medical Officer of Health and his staff to attempt to improve these services, and one is glad to be able to record that much of this endeavour has not been in vain.

Perhaps the most striking fact in the figures of life and death for 1949 is that for the first time in recorded Salford history no mother died in childbirth—the maternity mortality rate is 0·0 per cent. It is obvious we shall not be able to improve on that. This is an ideal state which obviously not only was difficult of attainment but will be even more difficult to maintain.

Debility following confinement is a point to which we must pay increasing attention. Many women do not make a full recovery to health following confinement. I am glad to be able to report that attendances for examination after confinement have shown a marked increase, partly due to the good arrangements we have made in four clinics where the mother can bring her baby for its first examination, and herself attend for a post-natal check-up.

MATERNAL MORTALITY.

We cannot always expect a 'nil' maternal mortality rate when there are upwards of 4,000 births every year, but it is a remarkable achievement and shows that there is not much wrong with the services provided for the mother at this critical time in her life. The graph shows the decline there has been over the last ten years which has ended in this 'nil' return.



While stressing the importance of the achievement, I feel that it is desirable that I should reiterate my warning against any undue optimism that this ideal state may continue without interruption.

One of the fortunate features of our work is the fact that in every pregnancy in Salford for some years now we have been able to make blood tests for anæmia, for the Rhesus factor and against syphilis. This work is one aspect of the devotion of all of your health officers who made the arrangements years ago to see that all the proper tests were done and the reward of this effort is being reaped now.

The housing of Salford's population is scarcely better at the time of writing this report than it was twelve months ago. During the year 1949, only some 300 new houses were erected but, during that time, ten thousand notices for the removal of insanitary conditions were served and, while this action alleviated much personal discomfort and prevented considerable ill-health, the main problem, that of the permanent improvement of housing conditions, remains almost untouched. One is glad to realise that the City is well aware of these sores in its midst and that its rulers are doing their utmost to heal or to eradicate them, but one feels that it cannot be too keenly realised that the replacement of a large proportion of existing property by decent dwellings is most urgently needed in order to improve the health of the population.

We know that Florence Nightingale was very interested in the work of the Manchester and Salford Ladies' Sanitary Reform Association, and it was she who said that the secret of health lies in the homes of the people.

When we are so concerned with delinquency and other social problems we remember that living with in-laws can sometimes make outlaws of the younger generation of the family. Overcrowding can lead to young folk, for whom there is "no room" in the house, seeking their pleasures elsewhere—indulging in questionable recreation.

Much greater attention has been given to improving PERSONAL HEALTH SERVICES. Among the personal service in which there have been developments, I would mention the Mothers' Clubs which have been set up in all of our nurseries and in two of our clinics. A great way to improve the health of a child is, of course, through the mother. If we are 'friends' with our mothers, if we can teach them and win them to a healthy way of life—then many problems of child disease and child neglect vanish. I attach the greatest importance to these clubs through which the staff and members of the Health Committee have had direct contact with the people whom we serve; we learn their problems, and we provide a happy atmosphere where all who work for material welfare meet the mothers. There is informal education; there is a way of "health through joy," for example, in the keep fit and country dancing classes we have for the mothers and there is emphasis on friendship, happiness and positive health.

Particular attention was given during the year to rendering the work of the staff more efficient. For example, meetings of health visitors, sanitary inspectors and other workers were held regularly; films and film strips were shown; talks were given, often by members of the staffs themselves on some interesting or difficult part of their work and fruitful discussion would often take place. The shortage of some kinds of staff, e.g., health visitors, was accepted, not as a matter of regret only, but as a challenge to organise their time better and one of the many improvements made was that a car was provided for them to take them out of their districts promptly after the necessary clerical work they had to do in the early morning; this saved the serious waste of time which used to occur when a number of bus journeys had to be made.

We have tried to care for our people not in a mass way, but as individuals. One example of this is that all those parents who have done a good job in the difficult task of bringing up handicapped children received a calendar at Christmas time with a message from His Worship the Mayor giving them a word of appreciation for their effort.

I would like to pay tribute to the health value of the work of several other Corporation Committees and to record thanks for the co-operation given by the Chairmen, chief officers and staff of these committees.

For example, through their improved facilities for public recreation, your *Parks* provide valuable services for family life and health. These "lungs" of Salford with their grassy open spaces, give the opportunity for healthy play of the children, and are a means of health for many families. In addition, entertainments in the parks have been arranged in connection with the "holidays at home" arrangements.

Then again, the *Art Galleries, Libraries and Museums Committee* does much to foster cultural activities, such as the Symphony Orchestra, Choral Society and Arts Club, to all of which the Corporation makes grants. The Arts Club in particular includes both a drama group and visual arts club and whilst doubtless these activities are pursued for their own sake, yet, in helping to allow Mr. Everyman to express the whole of his personality, they are of distinct health value.

The *Education Committee*, with its further education scheme, gives great support to the youth movements and drama groups. They also support such bodies as the St. John Ambulance Brigade, Scout Movement and other voluntary activities. All these give meaning and purpose and value to life and help in the social health of the people.

Civic Restaurants and Schools Meals Service is also a means whereby the nutrition of some of the citizens can be well looked after.

The *Municipal washhouses* provide facilities whereby the public can do their own washing.

The *Civic Welfare Department* maintains accommodation for aged men and women, and helps in numerous ways in the case of the elderly and the handicapped.

VOLUNTARY SERVICE.

It is often said that the opportunity for voluntary service is less nowadays, but there are still many ways in which we can all help.

Here are a few :—

(1) HOME SAFETY COMMITTEE. There is a great need for a Home Safety Committee on the lines of the well-known Road Safety Committees as there are more accidents to children *and* adults in the home than on the roads. In Salford, during 1949, there were 24 deaths and 200 cases of disability caused by accidents occurring in the home.

(2) CHILDREN'S PLAYGROUND (particularly for toddlers). There are several blitzed areas in Salford which could be made into children's playgrounds such as one in Lune Street in south Salford, which we think would make an admirable toddlers' playground. This idea would be attractive as well as useful and would provide an oasis of beauty in gloomy surroundings.

(3) GOOD NEIGHBOURS ASSOCIATION. There is need for stronger support to be given to such organisations as the "Good Neighbours" (Hon. Secretary—Mrs. Stout). The number of volunteers for "sitters in" is very low. There is a vast amount of good waiting to be done in visiting old people in their own homes or in hospital; visiting physically handicapped persons, both young and old, is a new expanding form of social service to the people.

(4) HOLIDAYS FOR CHILDREN. A great deal could be done by arranging holidays for our children, particularly from the congested areas. I have in mind problem families, although it need not be confined to these. I know of children who have gone away from home for a month or so and the hosts have spoken of how well behaved the children had been and how pleasant it was to have them, although before their holiday their conduct made one apprehensive.

(5) **EPILEPTICS.** Epileptics are neglected members of the community. The Regional Hospital Boards have not taken over colonies. I feel that some form of visiting service for epileptics, with an interest taken in their vocational training, would do a great deal of good.

(6) **HOME EMPLOYMENT.** One of the best ways in which we can help the handicapped is by better provision of home employment services, minor forms of occupational therapy. The British Red Cross do splendid work in this way for the aged and those who are so physically handicapped that they are homebound. Provision of simple diversions—knitting, sewing, simple handicrafts, vocational training, are most useful. Some of our mentally defective young adults (regarded as hopeless cases) have been able to earn 30s. per week, but even if the question of value and payment does not arise, much good can be done.

(7) **MOTHERS' CLUBS.** There is great need for more fortunate members of the community to take an interest in these Mothers' Clubs, which I have already mentioned, to improve their interest and usefulness and to help by conversation and friendliness in encouraging the mothers to better care of their children and better citizenship.

(8) **THERAPEUTIC SOCIAL CLUB.** Rather similar is the club we have started for psychiatric patients and one for neurotic sufferers, thus breaking down the sense of isolation which many of them feel. Taking part in the games and friendliness of the club does help to build up the morale of these sufferers from mental and nervous conditions and they lose their feeling of shyness and loneliness.

(9) **VOLUNTEERS TO ATTEND PUBLIC HEALTH CLINICS.** There are several ladies, friends and members of the Ladies' Public Health Society, who have done a grand job in giving of their time to visit our clinics to make a cup of tea for the mothers who are waiting attention. The cup of tea is merely a passport to friendship by which barriers can be broken down. This friendly service can radiate a spirit of goodwill.

DIPHTHERIA IMMUNISATION.

We have reason to be proud of the satisfactory rate of diphtheria immunisation we have achieved by the use of public health nurses. I believe that as much as possible should be done for people in their own homes, and that the services should be brought to the people, rather than the people brought to the services, and though clinics are convenient places where advice and care may be given we must regard them as second-best, for there is "no place like home." Since the days of Florence Nightingale, who realised that the prevention of child disease lay in improving the homes of the people, the work of the health visitor has gone from strength to strength and the most effective public health work has been done by health teaching given by the nurses in people's own homes. Over 80,000 inoculations, which is over 90 per cent. of the total, have been given with safety by public health nurses in this city either at the immunisation clinics we hold on public health premises or at home, if the mother so wishes. Many mothers wish to avoid the crowding and waiting which is involved by attending clinics and it must be admitted that one of the many advantages of home immunisation is that cross-infection is avoided. Although the National Health Service Act laid the duty of immunisation on the practitioner, I have seen no reason to alter our practice as the public health nurse

selected for this job, who has had far more experience than many medical officers and practitioners in the giving of injections, has done her work with scrupulous care and efficiency. As you know, one of our fundamental principles is that staff should do the work for which they are most fitted, and I think that the dignity of the nursing profession is enhanced when the nurse is allowed to carry out diphtheria immunisation in the home.

THE EFFICACY OF DISINFECTANTS.

During the year an outbreak of very mild dysentery, which was very little more than a nuisance, occurred in one of the day nurseries, but it was a sharp reminder for us to revise all our instructions for the prevention of spread of infection. This outbreak occurred because one of the young students did not report her sickness to Matron. One of the many results of this outbreak of otherwise small significance was that we tested the disinfectants used and were surprised to learn how extraordinarily weak and ineffective some of them were against the very organisms which cause most trouble in nurseries and other branches of public health work. It shows the value of a thorough investigation and sound detective work even in a minor outbreak. The results of our tests have been made known in several quarters and the matter will be pursued still further.

Much time was taken up during the year in *planning for the future*. Little brick and mortar could be used and we may modestly claim to have become expert in making use of available resources by the adaptation of existing buildings; for example, Cleveland House, where accommodation is proposed for spastic children and M. and C.W. clinics. Plans were drawn up for the provision of a health centre on the new Fairhope estate, for the use of Jutland House as a midwives' hostel, Seedley Library as a welfare clinic, and Sunday School rooms as an Occupation Centre for mental defectives.

ENVIRONMENTAL HYGIENE.

Time and thought were given to large schemes such as the Trinity clearance area of some 500 houses, and for the creation of smokeless zones.

We are not satisfied with existing legal powers so we have put forward suggestions (given in the Chief Sanitary Inspector's Report) for inclusion in a new Parliamentary Bill.

In addition to paying attention to *people*, we must also pay attention to *premises*, especially important premises. First come the homes in which people live; no less than 10,000 "Removal of Insanitary Conditions" notices were served and there is no doubt that the health, comfort and welfare of our people was vastly improved by the action which your sanitary staff took. Then there are the places where the public meet, such as the cinema, where problems of ventilation and prevention of over-crowding are of importance.

FOOD.

Visits were paid to 1,500 premises where food is prepared or sold. Over 1,000 notices were served on the occupiers, the vast majority of whom not only did the job required of them by the notice, but made further improvements on the lines of the advice of your inspectors. Elsewhere in this report there is an account of the free washing facilities which

were provided in public conveniences. In the food shops, over 700 hot water installations were made in order to provide an instantaneous and ample supply of hot water for hand washing and other purposes. A survey was made of facilities for cleansing of glasses and sanitary accommodation in all public houses.

Much other work, too long to detail here, is described elsewhere, and, in addition, a constant watch was kept on the purity of the drinking water and a measure of supervision was exercised over the swimming bath water. Codes of practice in relation to ice cream were adopted.

The most notable event in epidemic disease was the typhoid fever outbreak which at one time had alarming possibilities. Again, from this outbreak, many lessons have been learnt and relearnt; one of these was the importance of people rather than premises for the premises concerned were amongst the most modern and best equipped in our city. The outbreak was a sharp rebuff against complacency and a reminder that those diseases which played havoc with the nineteenth century Englishman can still strike an unsuspecting community. A detailed report relating to this epidemic is being prepared.

In conclusion, I should like to pay tribute to the work done by the staff of the health department and the members of the Health Committee, without whose ardent co-operation and willing help none of these services to our people could be accomplished.

I have the honour to be,

Your obedient Servant,

J. L. Brown

Medical Officer of Health.

HEALTH DEPARTMENT,
143, REGENT ROAD,
SALFORD.

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STATISTICAL SUMMARY, 1949.

Area.—The City of Salford has a total area of 5,202 acres.

Population.—(Registrar-General's Estimate at Mid-year, 1949)..... 178,900
 „ (Census, 1931) 223,438

Density.—The Mean Density of the City is equal to 34·4 persons per acre.

Live Births	{	Legitimate	1,773	Males,	1,614	Females.....	3,387
	{	Illegitimate	120	„	121	„	241
						Total	3,628

Annual Rate of Births per 1,000 of the Population 20·3

Still Births	{	Males	51	Total.....	89
	{	Females	38		

Annual Rate of Still Births per 1,000 Total Births 23·9

Deaths	{	Males	1,236	Total.....	2,334
	{	Females	1,098		

Annual Rate of Mortality per 1,000 of the Population 13·0

Percentage of total deaths occurring in Public Institutions 49·0 per cent.

Deaths from Puerperal Causes:—

	Deaths.	Rate per 1,000 Total Births
Puerperal Sepsis
Other Puerperal Causes
	—	—
Total

Death-rate of Infants under one year of age per 1,000 live births:—

Legitimate, 53. Illegitimate, 50. Total.....	53
Deaths from Measles (all ages) .....	...
„ Whooping Cough (all ages)	10
„ Diarrhoea (under 2 years of age)	36

TABLE M. 4.

SHOWING THE BIRTHS IN THE CITY OF SALFORD, DEATHS OF LEGITIMATE AND ILLEGITIMATE INFANTS UNDER ONE YEAR OLD AND THE PROPORTION OF DEATHS UNDER ONE YEAR OF AGE PER 1,000 BIRTHS DURING THE YEARS 1938 TO 1949.

Years.	Births.			Percentage of Illegitimate Births to Total Births	Deaths under One Year.			Proportion of Deaths under One Year per 1,000 Births.		
	Total.	Legit.	Illegit.		Total.	Legit.	Illegit.	Total.	Legit.	Illegit.
1938.....	3145	3037	108	3.4	233	213	20	74	70	185
1939.....	2925	2808	117	4.0	202	194	8	69	69	68
1940.....	2884	2742	142	4.9	219	209	10	76	75	70
1941.....	2518	2377	141	5.5	240	215	25	96	90	177
1942.....	2823	2632	191	6.8	217	203	14	77	77	73
1943.....	3085	2863	222	7.2	214	203	11	69	71	50
1944.....	3251	3025	226	7.0	202	182	20	62	63	88
1945.....	3022	2749	273	9.0	183	168	15	61	61	55
1946.....	3849	3610	239	6.2	205	180	25	53	50	104
1947.....	4220	3973	247	5.9	258	240	18	61	60	73
1948.....	3761	3570	191	5.1	157	147	10	42	41	52
1949.....	3628	3387	241	6.6	193	181	12	53	53	50

TABLE M. 5.

SHOWING THE BIRTH-RATES, ALSO RATES OF MORTALITY FROM ALL CAUSES, FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES, AND FROM TUBERCULOSIS OF RESPIRATORY SYSTEM, CANCER, NERVOUS DISEASES, HEART DISEASES, BRONCHITIS, PNEUMONIA AND THE INFANT MORTALITY RATE DURING THE YEARS 1938 TO 1949.

Years.	Population.	Rates per 1,000 Population from									Deaths under One Year to 1,000 Births.	Marriage Rate.
		Births.	Deaths, All Causes.	Seven Principal Zymotic Diseases.	Tuberculosis of Respiratory System.	Cancer.	Nervous Diseases.	Heart Diseases.	Bronchitis.	Pneumonia.		
1938 ...	199,400	15.8	13.1	0.3	0.9	1.7	0.8	2.8	0.6	1.0	74	...
1939 ...	196,600	14.9	14.3	0.2	0.9	1.8	0.7	3.8	0.7	1.0	69	...
1940 ...	173,200†	16.6	19.1	0.3	1.1	2.0	1.1	5.3	1.7	1.2	76	...
1941 ...	159,720†	15.8	16.8	0.4	1.1	1.7	1.1	4.3	1.1	1.2	96	...
1942 ...	153,300†	18.4	14.5	0.4	0.9	2.2	1.0	3.4	0.9	0.8	77	...
Average 5 years		16.3	15.6	0.3	1.0	1.9	0.9	3.9	1.0	1.0	78	...
1943 ...	153,000†	20.2	15.7	0.3	1.0	2.2	0.9	2.7	1.9	0.9	69	...
1944 ...	155,810†	20.9	14.6	0.4	0.9	2.1	0.9	2.4	1.9	0.6	62	...
1945 ...	157,300†	19.2	15.5	0.2	0.9	2.0	0.8	2.2	2.9	0.8	61	...
1946 ...	169,470	22.7	13.3	0.2	0.8	1.9	0.9	1.8	2.0	0.6	53	...
1947 ...	174,070	24.2	13.3	0.4	0.8	2.0	0.5	2.1	1.9	0.6	61	...
Average 5 years		21.4	14.5	0.3	0.9	2.0	0.8	2.3	2.1	0.7	61	...
1948 ...	178,100	21.1	11.8	0.2	0.8	2.1	0.7	1.6	1.4	0.4	42	...
1949 ...	178,900	20.3	13.1	0.2	0.6	1.9	0.7	2.1	1.8	0.7	53	...

† Civil population.

SANITARY CIRCUMSTANCES.

HOUSING.

Having assessed the probable output of new dwellings to be erected for Salford people up to the end of 1952, and making allowance for continuance allocations for relief of overcrowding and urgent priority housing cases, the Council during this year decided to recommence slum clearance operations.

As a result of an official representation, an unhealthy area, $14\frac{1}{2}$ acres in extent, within which there are 461 dwellinghouses, three public houses and 21 other buildings, was declared to be a clearance area.

As this locality is to be redeveloped with new dwellings in accordance with the City Engineer's planning proposals, the Council proceeded in the case of this area by making a Compulsory Purchase Order under the provisions of Part III of the Housing Act, 1936. The Order was made and advertised just before the end of the year and it is anticipated that the formal procedure enabling the Order to be implemented will be completed during 1950.

The Order referred to is the first, comparatively small, beginning of an ambitious programme for the long overdue reshaping of Salford. Current action in respect of slums must perforce be limited to bounds imposed by present-time restrictions on new building ; nevertheless the clearance of the area now defined may be considered as the start of large scale redevelopment which should proceed at accelerating speed as the years go by.

In the meantime, there is a continuation of the policy of making the most of much very unsatisfactory domestic accommodation by the exercise of Public Health Act powers : the statistics given in the Table on a subsequent page reveal that a vast amount of dwelling-house repair and maintenance work has been carried out as a result of informal and formal procedure on the part of the Authority.

The number of houses discovered to be totally unfit and incapable of further maintenance is growing day by day. Old and worn out houses, shaken by war damage, often become, not only unhealthy, but imminently dangerous.

Twenty-nine houses of this type have had to be dealt with during 1949 under Housing Act, Part II, procedure :—

Twenty-three demolition orders were made by the Council under Section Eleven of the Act.

Five undertakings not to use premises for human habitation were accepted by the Council.

One Closing Order was made under Section Twelve. (This concerned an out-building in which a family of four persons were living).

SMOKE ABATEMENT.

For a hundred years, war has been waged against unnecessary industrial smoke, not perhaps with the best of weapons or the fullest energy, but at least the public conscience has been stirred to a recognition of the moral responsibility of works' managements in the matter. Scientific knowledge and inventive genius have presented industry with improved methods of furnace operation and in so doing reduced the necessity to produce the wasteful by-product—smoke.

To cavil at the absence of complete success would be ungenerous, for the stage has been reached when reliable authorities now assess the still heavy smoke pollution to be the responsibility equally of industrial and domestic heating. Yet it should be borne in mind that there still exist many large steam-raising units operating exactly as they did half a century or more ago. Were steam-raising accounts subjected to the same careful scrutiny as other production costs there might well be a deluge of recording instruments into boilerhouses, followed in many cases by at least some form of mechanical stoking. The results obtained from low grade fuel are sometimes remarkable.

Of one hundred and thirty-five cases of black smoke emission investigated during the year, excluding metallurgical chimneys, eighty-nine were in connection with hand-fired furnaces. In only six of them was the smoke unavoidable. This is not such a poor record as might be anticipated in considering manual versus mechanical stoking, but the fact remains that a small boiler plant consuming only 50 tons of coal per month could reduce its fuel bill £50—£70 per annum on current prices by installing mechanical stoking methods and correct use of proper recording instruments.

Bearing these points in mind, a " Code " prepared for the guidance of those concerned with the installation of new furnaces in the city, and widely distributed to consultants, furnace manufacturers, etc., requires among other things that every newly installed steam-raising furnace must be suitable for mechanical firing, that where possible this method must be adopted when burning bituminous coal, and that water or steam meters and draught gauges must be provided. Where coal consumption is 20 tons or more per week C.O.₂ gas recorders or indicators are advised so that firing efficiency can be under control.

The " prior approval " scheme, in its first complete year, has been an unqualified success. Eight proposals were submitted ; one was approved for coke burning only, three were certified without alteration and four after amendment to meet the recommendations of the Advisory Panel responsible for " vetting " the proposals.

From time-to-time recently installed furnaces are discovered which were not submitted under the scheme. As their discovery is due to the smoke emitted, the owners are reminded of their liability to prosecution and given the opportunity of operating the installation smokelessly. Two such cases came to light during the year. In one instance, coke has now been substituted for coal and in the other alterations are in progress on the lines of more efficient steam utilisation to bring the steam-load within the capacity of the boiler. It is hoped eventually to burn coke.

New sources of industrial smoke pollution are thus being prevented and so far as can at present be judged, the introduction of national legislation on similar lines would be more welcomed than resented by all concerned.

Other local authorities have introduced or are contemplating similar schemes, a remark also applicable to the project to establish three smokeless zones in the city, which is being vigorously pursued. Associated difficulties are being surmounted to such an extent that it will be possible to present a workable scheme for the City Council's approval early in 1950, and, subject to the Minister of Health's agreement, to operate it within twelve months. By this means alone, 4,913 dwellinghouses, three industrial steam-raising installations, 11 other manufacturing undertakings and 78 commercial and miscellaneous establishments, burning 11,936 tons of bituminous coal annually can become smokeless.

Thus are being laid the foundations of a new attack, the most direct in this country's history, to be launched against the smoke scourge. Coupled with them is the National Smoke Abatement Society's endeavour to render the legislative approach to existing installations more effective and to secure recognition of the principal of Certification of Boiler Firemen.

Recent improvement in the quality of coal for industrial purposes has been maintained. No longer is poor coal the primary reason for black smoke. More to the point is the fact that deliveries vary in grade, meaning size, occasionally. Wide variations can be a great source of difficulty where mechanical stoking is operated. The Ministry of Fuel continues useful service in investigating cases brought to its notice and, what is more, secures relief when circumstances warrant it.

Court proceedings for black smoke emission are not readily indulged in, but it has been necessary to prosecute two Salford firms for failure to comply with abatement notices served upon them. Magisterial Abatement Orders were made in each case.

Fifty-nine observation notices were served, 38 of which related to black smoke emissions of two to five minutes aggregate per half-hour period, 13 for emissions up to ten minutes, seven aggregating over ten minutes, and one concerned a six minute offence by a railway locomotive engine.

Abatement Notices were served on seven persistent offenders and complied with. Causes ranged from the habitual late arrival of a boiler attendant to a glaring case of combustion inefficiency and steam wastage. Coke is now used in the latter case.

It can now be revealed that previous reference to a proposed new power-house in the Higher Broughton district related to the works of a large firm adjoining Kersal Moor, whence a black smoke and severe grit nuisance has persisted for several years. The new plant is the outcome of representation by the two local authorities concerned and recognition by the firm of its moral as well as legal obligations.

After much delay through supply difficulties, the four watertube boilers, fully mechanised and instrumented, erected just inside the Salford area, will definitely be brought into commission next March, and the old, much overloaded Lancashire boilers discarded, to the great relief of neighbouring residents, whose commendable patience and fortitude, once the position was understood by them, is about to be rewarded.

Tabulated records of soot deposit and measurement of smoke from the several stations operating in the city are presented by the City Analyst in his section of this report.

Dust and Grit Emission.

Unexpected problems frequently follow in the wake of new industrial processes. Preparation of the asphaltic material with which major roads are being carpetted is a case in point.

Ingredients are dried in a rotary kiln heated by oil flame, some of the finer ones, lime-flour and sand, being carried away under influence of the high velocity created. Two such cases, one just outside the city, have been dealt with. In both cases nuisances to Salford residents were evident.

One has been resited well away from other buildings and both have been fitted with dust-arresting devices and the nuisances abated.

Steel foundry cupolas can be a source of trouble by emitting gases heavy with fine, red or orange coloured dust and the nuisance is frequently difficult to cure, especially when the metal for melting consists of dirty scrap.

A case of this type came under notice, and as the foundry was sited in a densely populated area, the owners, a well-known firm of mechanical stoker manufacturers, acted expeditiously to find a remedy. No known standard equipment was suitable. Similar cupolas with reputations for efficient dust extraction were visited and authorities on the subject consulted. Eventually the firm's staff designed a special device and to further minimise the effect of any dust still remaining, the chimney was raised from 50 to 80 feet, three or four times the height of surrounding cottage property, whose roofs are once again their natural colour.

It has now been operating for several months, and although the metal being fed to it is not as dirty as hitherto, appears to be highly efficient.

The cost, approximating to £3,000 is no mean expenditure even for a firm of this calibre to incur almost voluntarily, and Salford is proud to house such concerns.

Noxious Effluvia.

Open air boiling of a resinous compound in a congested part of the city was the source of objectionable fumes and the subject of complaint.

For some time the firm did not appear willing to co-operate in attempts to suppress the nuisance and were reluctantly ordered to discontinue the process at the site. The pans were, however, re-erected on a more remote site with an extractor fan to conduct the fumes to a chimney instead of allowing them to be liberated at ground level. It was not the success hoped for and the process is now carried out under cover, the waste gases being condensed and disposed of as a semi-liquid sludge.

Fumes liberated during the emptying of hot liquid pitch on to a pitch field at a tar distillery were also alleged to be offensive. This trade is one to which the Alkali Works (Regulations) Order, 1906, applies. The alkali officer investigated the matter and no further complaint has been received.

Specified under the Alkali Works (Regulations) Act are a number of trades prone to produce noxious vapours and gases, emission of which is controlled within prescribed limits. At present the law is administered in this area from the Liverpool district. This is felt to be unsatisfactory and Salford has joined with adjacent local authorities in supporting a representation to the Minister of Health for the appointment of an alkali officer located in the area.

INSECT DISINFESTATION SERVICE.

During the year 1949, the amount of work accomplished by the Department's disinfection service has greatly exceeded the volume of work done in any previous year.

The number of operations carried out was 1,717. In that total, each separate job counts as one operation, whether it has been a case of a half-hour spent by one man in a small cottage, two hours at a hospital, or the two or three days, filled in by two or three men, in the treatment of a four-storey factory.

The disinfection staff has consisted of two full-time operators and an additional temporary man who was employed from June till October. Men, material and equipment have been transported round the district in a light Morris van.

The insecticide employed during the year was D.D.T. in various formulations obtained direct from the Geigy Company.

The fact that the volume of work has increased does not mean that insect infestation of the City has increased. To be offset against the number of tasks carried out in connection with premises in which colonies of bugs or cockroaches have established themselves, many operations were executed as general precautionary treatment for the benefit of the public health, as, for instance, the setting up of a toxic barrier against flies in canteens, food shops, schools, nurseries, etc. Another large-scale operation of this nature was application by spray of a modicum of D.D.T. to all the 49,000 ashbins and swill bins in the City ; labour for this latter task was forthcoming by the kind co-operation of the Director of Public Cleansing.

The year's records show an increase in the number of buildings infested with cockroaches. 798 cases of cockroach infestation have been dealt with in 1949, as against 436 in 1948, and 231 in 1947.

On the other hand, there is a very noticeable decrease in the incidence of bug infestation.

Comparative figures for the last three years show that, of the whole of the insect control operations in each year, percentages were as follows :—

	1947.	1948.	1949.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Bug Control;	52	39	26
Cockroach Control	32	34	48

Other figures which illuminate the evidence of successful progress against bedbugs are those which can be quoted in respect of the local authority's houses and flats, viz. :—

This year, only 52 occupied Corporation dwellings have been referred for disinfection treatment, of which ten were houses recently requisitioned. Of the 52, 28 were treated for bedbugs and the remainder for other insect pests.

The following figures of bug infestation in Salford Council houses serve as evidence to support the prospect that, in the not too far distant future, cases of bug infestation in the Salford district will be rare :—

	1946.	1947.	1948.	1949.
Number of occupied Corporation dwellings treated for bedbugs	487	232	69	28

The fact that only 28 cases of bug infestation have come to the notice of the Housing Visitors in their supervision of 4,073 Council houses and flats, is most encouraging. There can be little doubt that the Salford system of precautionary treatment administered at the time of allocation of tenancy is proving to be a wise policy :—

Whenever the investigation of the home circumstances of a successful applicant for a Corporation tenancy reveals evidence of positive or probable bug infestation, arrangement is made for spray treatment of furniture at the old address before removal takes place, and also for the imposition by spray of a deposit, toxic to bedbugs, upon the walls of the new home. (The tenant is required to pay for this service, excepting in hardship cases).

During the summer, two sheets of water were successfully treated for water-bred flies. An attempt will be made next summer to prevent the nuisance of the annual invasion of premises in the Lower Broughton district by the midges which, in millions, leave the water and mud of the River Irwell.

A not unusual occurrence in an urban locality is the reported presence of an army of blow fly maggots which suddenly appear crawling along a street surface. Two such complaints reached my Department during the warm weather. In both cases, investigation revealed that the carcase of a dead bird in eavesgutter or rainwater head, had been blown ; as the larvæ, becoming replete, left the carcase, they dropped down the inside of the rainwater pipe to be discharged through the shoe upon the flagged footpath.

The following tables will present a summary of insect control operations carried out in Salford during the year :—

TABLE I.

Numbers and Types of Premises Treated.

A. Domestic Premises—

(1) Occupied Houses (privately owned).....	781	}	Owners orders	469
House and Shop (privately owned)	15		Occupiers orders	326
Houses Let-in-Lodgings (privately owned)	10		Work by L.A.—owners	
Common Lodging Houses (privately owned)	8		default on notice	1
Plus 20 occupied by verminous persons...	20		Free of charge	38
(2) Occupied Corporation Houses and Flats,		}	On estates	42
plus	52		Requisitioned	10
General cockroach treatment of the whole				
of Gerald Road Estate.....	196			
Removals into Corporation Houses	156	}	Furniture at old address and	
			interior of new home—	
			three free.	

B. Non-Domestic Premises—

Public Houses	7	}		
Hostels.....	6			
Lock-up Shops	3			
Laundry.....	1			
Offices and Stores	5			
Stables	4			
Piggery	1			
Factories	7			
Offensive Trade Premises	1		Education Committee....	71
Boiler Houses.....	1		Works and Office.....	17
Public Baths and Washhouses	3			
School Premises	4			
Ambulance (deloused)	1			
Canteens and Kitchens	88			
Restaurants	4			
Bakehouses.....	3			
Retail Food Shops	29			

C. Visits to Hospitals.....	117
Visits to Nurseries and Clinics	13

D. Houses cleansed from vermin prior to demolition	
(Section 17, Housing Act)	21

E. Verminous persons cleansed	20
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F. Special Operations—

Spraying of ashbins and swill bins.....	49,000 approx.
School Outhouses	82
Ponds	2

TABLE II.

<i>Insect attacked.</i>	<i>Number of operations.</i>	
Bedbug	587	
Cockroaches	798	} Plus 117 hospital visits.
Flies	160	
Fleas.....	20	
Lice	21	
Cricket	17	
Silverfish.....	3	
Clothes Moth	27	
Flour Moth	1	
Furniture Beetle.....	4	
Larder Beetle	1	
Spider Beetles	2	
Earwig	5	
Wasps	1	
Caterpillars (Moth)	1	



Bug infested premises. Treatment by spray.



Cockroach infested premises. Treatment with insecticidal dust.

POLICE ACCOMMODATION.

An investigation into conditions of the above was made, covering structural defects, lighting, heating, ventilation, sanitary conveniences, washing facilities and meal facilities.

Recommendations for improvement of environmental conditions were sent to the Chief Constable for submission to the Watch Committee.

HYGIENIC CONTROL OF FOOD ESTABLISHMENTS.

It has been said : “ The second greatest mistake in business is negligence. The greatest is carelessness.” This saying has particular significance for the Food Industry.

There is much talk of education, encouragement and suggestion, but the idea is rapidly gaining ground in my Department that anyone who does not know that he should wash his hands after using a water closet, or that he should not cough or sneeze over other people's food, deserves punishment. In other words, ordinary decent conduct is all that is required and the educational pamphlet or cup-of-tea lecture, nice as they are, are no real substitutes for plain speaking by responsible authority.

One would not like to see persecution or even prosecution if such could be avoided. I fear we all need a timely reprimand. There is, however, nothing to be gained by beating about the bush. The plain fact is that most of the short-comings in the Food Industry, as elsewhere, are due to negligence or carelessness. There is no valid excuse for dirty premises, dirty persons and dirty habits in connection with food, and yet these are the things for which so many excuses are being made at the present time under the pretext that the remedies are "frightfully scientific." In truth every schoolboy knows them.

In Salford, out of 1,500 Food Establishments visited, it was necessary to serve 1,200 notices on occupiers. In the main they are just ordinary folk who have defaulted and do not mind if they get notices of their short-comings from the Local Authority. I am proud to say that they have reacted magnificently and in many cases have gone the extra mile. In four cases only has it been necessary to institute legal proceedings.

All this is not to say that we have neglected educational activities in this City. Indeed, we have tried to do this in a very practical way. Free washing facilities in public conveniences, gas geysers for food shops, attractive certificates for legal registration, and the application of the master principle of food hygiene, i.e., "temperature-control," are all innovations of this City. We do think, however, that personal responsibility under the supervision of the Local Authority's Sanitary Inspector is still the most effective method of hygienic control of food premises.

FREE WASHING FACILITIES IN PUBLIC CONVENIENCES.

This year has seen the introduction of what might become a new principle in Local Government, i.e., the duty of the Local Authority to provide free washing facilities for the individual as he journeys.

In Salford, anyone may have a free wash at any time in the City's Public Conveniences.

Originally the scheme was started for food handlers and permits were issued, but it soon became apparent that a free service of this kind would be amply justified for the use of the public in general.

Outdoor food handlers, travellers, transport workers, police, postmen, and a host of others are regularly using the service.

Hand drying fans and liquid soap dispensers have been found to be economical and do not lend themselves to abuse.

The idea has already spread to many other towns and it is possible that someday free washing facilities may be universally accepted as an integral part of any public convenience.

FACTORY CANTEENS.

With the easing of building licensing restrictions in regard to food premises and the greater availability of modern equipment, attention has been focussed on the installation of modern equipment and hygienic improvements in the various canteens throughout the City.

In the main, attention has been drawn to the necessity for suitable wall and floor finishes, adequate ventilation, suitable store rooms, storage equipment and working tables. The installation in the kitchen of a wash basin is considered a necessity in order to maintain a high standard of personal cleanliness. Washing up facilities have in many cases been found to be inadequate. A recommended installation consisting of an impervious sink with a gas sterilising sink alongside and impervious draining boards on either side has met with approval. An alternative installation for the smaller type of canteen consists of two sinks fitted together with draining boards on either side and in which washing is carried out in one sink and rinsing in the other.

At the same time regular cleansing at the end of each working day, a high standard of cleanliness throughout the premises and intelligent handling of food is also stressed.

ICE CREAM.

In 1949, the Ministry of Health approved the application of Section 14 of the Food and Drugs Act, 1938, to the City of Salford. In consequence all premises used for the manufacture, storage and sale of ice cream are required to be registered and a survey of such premises has been made. Attention has been given to the installation of new plant, which is needed to comply with the requirements of the Ice Cream (Heat Treatment) Regulations, 1947, also to the provision of separate rooms for the manufacture of ice cream. The Department has collaborated with vendors in the improvement of vehicles, nearly all of which are now covered-in to minimise the risk of contamination. A pleasing feature during the past year has been the increase in the sale of pre-packed ice cream and the consequent reduction in loose sales.

MILK.

In October, 1949, the Milk (Special Designations) Act, 1949, came into operation and all premises, numbering 776, used for the production and sale of designated milk were inspected. The new regulations include the designation "Sterilised" in addition to the designations "Pasteurised" and "Tuberculin Tested" and licences have been issued in respect of each designation at each premises. Regular supervision has been given to each of the four pasteurisation, and one sterilisation plants situated in the City in addition to the weekly sampling of designated milk in the course of delivery to the consumer. The sampling of raw milk on delivery to the dairies has been continued and the samples submitted for examination for tubercle bacilli.

BUTCHERS' SHOPS.

Under new powers granted during the year by virtue of the application of Section 14 of the Food and Drugs Act, 1938, the registration of premises in which sausages are manufactured or in which potted, pressed, pickled or preserved food is prepared for sale has become compulsory.

Before registration, all premises were inspected and a total of 130 letters written pointing out contraventions and recommending the execution of works before registration could be effected.

In several cases, shops and preparing rooms have been tiled and floors laid in terrazzo or other suitable flooring. A minimum requirement has been the installation of an impervious surface at the rear of working tables and blocks in order to reduce contamination. Attention has also been focussed upon suitable methods and situations of ventilators and the types and nature of refrigerator linings. Many unsuitable types of pickling vessels have been encountered, encouraged, no doubt, by shortage of suitable supplies. A suitable sink with an abundant hot water supply and a high standard of cleanliness throughout the premises leaves little room for criticism.

At the same time, sanitary matters are dealt with and properly paved yards and passages, efficient drainage systems, sound rain-water pipes, gutters and roofs are always included in reports.

SHOPS ACTS.

Continued supervision of shops was maintained with a view to securing a high standard of health and comfort for assistants.

1,968 visits to secure compliance with early and half-day closing were made, and the provisions of the Shops (Sunday Trading Restriction) Act, were enforced.

PROPOSED NEW LEGISLATION.

The following recommendations for new legislation were put forward, but unfortunately had to be cut out this year on grounds of expense.

Byelaws for Food Premises, Food Vehicles and Food Stalls.

Legal Provision Sought.

Power to make Byelaws with respect to registration, construction and observance of cleanly conditions and practices in connection with food premises, food vehicles and food stalls.

Grounds for Application.

1. Section 15 (1) of the Food and Drugs Act, 1938, gives power to make Byelaws "for securing the observance of sanitary and cleanly conditions and practices in connection with the handling, wrapping and delivery of food sold or intended for sale for human consumption and in connection with the sale or exposure for sale in the open air of food intended for human consumption." The section does not appear to give power to make Byelaws governing the *registration and construction* of food premises, food vehicles and food stalls.

2. In Salford there is a serious shortage of decent food premises, and it is essential that necessary alterations should be carried out before businesses are commenced. For this purpose registration is imperative. With the relaxation of food regulations certain types of businesses such as snack bars, restaurants, wet fish shops, greengrocers, etc., are being commenced in unsuitable premises and in considerable numbers. There is also large scale distribution of foodstuffs from vehicles and stalls and there is no legislation to require registration or essential features of construction.

3. Section 13 gives a fair measure of hygienic control over premises which are of satisfactory construction, but it does not *regulate* construction, and such items as adequate artificial and natural lighting, so necessary where food is prepared, are often lacking. There is no power to close an unsatisfactory business. Section 13 deals with "rooms" only and there is no provision for vehicles and stalls.

4. It is desired to make Byelaws giving specific requirements for many classes of business, e.g., snack bars, cafés, restaurants, butchers, greengrocers, wet fish businesses, confectioners, ice cream shops, etc., food vehicles and stalls. There is at present a tendency in many towns to make agreed Codes of Practice between the Local Authority and trade associations. The Codes of Practice have no legal significance. It is considered here to be outside the function of Local Government to make private agreements of this nature and that the correct procedure would be to make Byelaws for enforcement by the Local Authority.

5. Last year an application for all "rooms" where food is prepared to be registered, was defeated, apparently because certain classes of business premises had enjoyed privileges exempting them from registration under Section 14 of the Food and Drugs Act, 1938. A more gradual approach is now envisaged whereby Byelaws will be submitted for approval to the Ministry of Health for each class of business, and will include the all-important items of *registration and construction*.

Sanitary Accommodation in Catering Establishments.

Legal Provision Sought.

Power is sought to compel all catering establishments to provide adequate sanitary accommodation for persons consuming meals on the premises.

Grounds for Application.

1. The provisions of Section 89 of the Public Health Act, 1936, which gives power to require sanitary conveniences to be provided at a "refreshment house," are of doubtful application with regard to such premises as cafés, restaurants, snack bars, canteens, etc. There is a large body of informed opinion which regards the term "refreshment house" as applying to licensed premises only. It is *ejustem generis* with "inn, public house, beer-house."

2. Salford is a closely built-up area and complaints are often received of persons fouling the streets and back passages after consuming meals at these places even when public conveniences are in close proximity to the premises.

3. It is contended that adequate sanitary conveniences should be available on these premises and that they are in fact as necessary as at inns, public houses, beer-houses, which are clearly within the scope of Section 89 of the Public Health Act, 1936.

Byelaws for Hairdressing Establishments.

Legal Provision Sought.

Power to make compulsory the registration of barbers and hairdressers, and authorising the Corporation to make Byelaws with a view to securing cleanliness in such establishments.

Grounds of Application.

1. There are many of these establishments in Salford. New businesses are continually opening up and old ones closing down or changing hands. Decent premises are scarce and businesses often commence in very unsatisfactory conditions. Compulsory registration is, therefore, necessary for efficient control.

2. The hygienic standard in these establishments in many cases is very low and Byelaws are necessary to promote a decent standard of cleanliness of the premises, of the people operating, and of the instruments, towels and materials used.

Provision of Hot Water Installations in Sub-Standard Dwellings.

Legal Provision Sought.

Power is sought for the Local Authority to make grants to owners or occupiers towards the cost of providing and fixing suitable hot water installations in sub-standard dwellinghouses.

Grounds for Application.

1. There are 30,000 houses in Salford without reasonable means of hot water supply. The majority of these houses are in proposed clearance areas, and the only hope of any decent amenities for the tenants is the fulfilment of the various clearance and town planning schemes. It is estimated that in many cases this will take from 15 to 25 years.

2. Hot water is a fundamental hygienic requirement in any home, and it is maintained that it would be in the public interests to contribute towards an amenity such as a gas or electric geyser, particularly in homes which must continue to be occupied until the Local Authority is in a position to take action. Rents are usually restricted in such property and the provisions of the Rent Restrictions Acts for effecting improvements have no appeal to the owners of this class of property, who in many cases offer it to the Local Authority gratis. It would seem equitable that the Local Authority should do something towards easing conditions which await the convenience of the Local Authority for their complete amelioration.

3. The principle of granting financial assistance for the maintenance and improvement of dwellinghouses is embodied in Part II of the new Housing Bill, but it only applies to property which can be satisfactorily reconditioned to last for 30 years, and the cost of which would amount to over £100. This is neither practicable nor desirable as far as Salford's sub-standard dwellings are concerned and the most that can be hoped for is that they should have the means for promoting and maintaining cleanliness until such times as the Local Authority is in a position to fulfil its obligations under the Housing Act.

Repair or Renewal of Hot Water Systems, Washbasins and Baths.

Legal Provision Sought.

Power to require, repair, or if necessary, the renewal of hot water systems, washbasins and baths in dwellinghouses.

Grounds for Application.

1. In addition to the ordinary dwellings typical of nineteenth-century-provision for the working classes, there are in Salford many other houses which were originally occupied by persons other than those of the working classes. In many cases they have modern amenities such as hot water systems, washbasins and baths. The localities in which this class of property exist have generally deteriorated, the original type of occupier has moved farther afield, and the dwellings are now occupied by the working classes.

The tendency is for owners of this class of property to do away with the modern amenities when they become defective. An attempt by the Manchester Corporation to get a washbasin repaired under the provisions of Section 39 (c) of the Public Health Act, 1936, failed, and there is apparently no statute law to compel an owner to repair or renew defective hot water systems, washbasins and baths.

2. The removal of such amenities from dwellings is a retrograde step and not in keeping with present day standards. It is true that the houses are doomed to ultimate destruction, but it is felt that necessary amenities should be reserved as long as possible in the interests of the tenants and indirectly of the community at large.

3. An attempt was made in the Salford Corporation Bill, 1948, to extend Section 39 (c) of the Public Health Act, 1936, to include "lavatory basins" and "baths," but it was ruled that these appliances were not *ejustem generis* with the appliances mentioned in that section. The present application includes hot water systems and is a direct application, without reference to other enactments, to prevent deterioration and loss of amenity standards in this class of property in Salford.

Prevention of Rag Sorting and Depositing of Refuse on Public Thoroughfares and Unenclosed Land.

Legal Provisions Sought.

1. Power to prevent sorting of rags, old clothes, or similar articles, except on licensed premises, by persons collecting or dealing in these articles or by any person acting on behalf of or assisting such persons.

2. Power to prevent the tipping or depositing of refuse on any public thoroughfare or unenclosed land.

3. Authority for the Corporation to enter and remove such refuse where the person tipping or depositing it cannot be found.

Grounds for Application.

The grounds for the above requirements are inter-related and have, therefore, been stated together as follows :—

1. Rag-and-Bone-Men are in the habit of sorting rags, etc., in streets, back passages, or on any spare piece of land available. The work is usually carried out in close proximity to marine store dealers premises where the rags are sold. In most cases, Rag-and-Bone-Men have no premises of their own and even the hand-carts they use are hired out to them by the marine store dealers. The public footpaths in front of marine store dealers' premises are usually monopolised by Rag-and-Bone-Men, and become littered with dust and small pieces of material. Sometimes spare pieces of land are used in the same way and the Corporation have often to clear away the leavings from this process. It is not always possible to prove a public health nuisance.

2. Section 255 of the Salford Improvement Act, 1862, makes it an offence for " every person who within any street, to the obstruction, annoyance, or danger of the residents or passengers . . . throws or lays down any stones, coals, slate, shells, lime, bricks, timber, iron, or other materials (except building materials so enclosed as to prevent mischief to passengers) . . . throws or lays any dirt, litter, or ashes, or nightsoil, or any carrion, fish, offal, or rubbish, on any street, or causes any offensive matter to run from any manufactory, brewery, slaughter-house, butcher's shop, or dunghill into any street." It is now desired to make it an offence *to deposit* such materials and rubbish *irrespective of whether it forms an obstruction, annoyance or danger*, except when it is deposited in connection with building operations for the time being in progress. It is also desired to make it an offence to deposit such materials on " unenclosed land " in addition to " within any street " as stated in the Act of 1862, and irrespective of whether it is a nuisance within the meaning of Section 92 of the Public Health Act, 1936.

3. There are many " blitzed sites " and spare pieces of ground in the City which have in fact become public amenities and which are constantly disfigured by persons tipping refuse on them even though such refuse may be innocuous and unlikely to cause a public health nuisance. It would not improve matters to have such land properly enclosed nor would it be desirable. It is, therefore, contended that the Corporation should accept some responsibility in the way of preventing such sites from becoming public tips.

Maintenance of Yard Boundary Walls, Yard Party Walls and Yard Doors.

Legal Provision Sought.

Power to require an owner to maintain in good condition yard boundary walls, yard party walls and yard doors.

Grounds for Application.

1. The bulk of the dwellinghouses built in Salford prior to 1914 were laid out in terraces, each house having a small yard at the rear. There have recently been many cases in which yard walls have collapsed or have been pulled down on account of danger. Owners have been requested to rebuild them and have refused, and the Local Authority has apparently no power to compel reinstatement.

2. In this class of property the water closet and coal store are situated in the yard, and it would seem reasonable that a fair measure of privacy and protection should be maintained.

THE STAFF.

During the year, three Inspectors left to take up other appointments. Mr. C. L. Lewis became District Sanitary Inspector at Morley, Mr. A. Canovan secured an appointment as Senior Assistant Teacher in the Building Department of the Northampton Technical College, and Mr. N. H. Lloyd went as Hygiene Officer to Dar-es-Salaam, Tanganyika.

Three District Inspectors were engaged—Mr. J. Webster, who came direct from the Ex-servicemen’s Course at Liverpool University, Mr. S. Joules, who came from the Ex-servicemen’s Course at the Royal Technical College, Salford, and Mr. A. Scott, who was a District Sanitary Inspector at Eccles.

One member of the staff, Mr. Norman Harvey, passed the membership examination of the Institute of Sanitary Engineers, and also passed the Food Inspector’s examination of the Royal Sanitary Institute. Mr. F. R. Williams passed the Food Inspector’s examination of the Royal Sanitary Institute. Two full-time students, Mr. W. F. Maling and Mr. J. Hobson, passed the Sanitary Inspector’s examination of the Royal Sanitary Institute.

Two students, Mr. F. Lawson and Mr. E. Forrester, were engaged.

The Sanitary Inspector’s Staff at the end of 1949 was as follows :—

Deputy Chief Sanitary Inspector	1
Sampling Officer	1
Drainage Inspector.....	1
Shops Inspector	1
Rehousing Inspector	1
Smoke Inspector.....	1
Food Inspectors	3
District Sanitary Inspectors.....	8
Student Inspectors.....	4
Clerical Staff	5
Drainage Assistants	2
Disinfestation Assistants ;.....	2
Conveniences Attendants	14

WATER.

(In accordance with Circular 2/50 of the Ministry of Health).

The water supply is obtained from the Manchester Corporation’s reservoir at Longdendale and Thirlmere. In general the supply has been satisfactory in quantity and quality. For further details relating to quality see the City Analyst’s report.

All dwellinghouses in the City and the entire population are supplied with water on the constant system laid on from the mains direct to the houses.

There are 48,078 dwellinghouses in the City and a population of 178,900.

SUMMARY OF FOOD POISONING OUTBREAKS, 1949.

(In accordance with Circular 2/50 of the Ministry of Health).

Total number of outbreaks.	Number of cases.	Number of deaths.	Organisms or other agents responsible with number of outbreaks of each.	Foods involved with number of outbreaks of each.
Nil.	Nil.	Nil.	Nil.	Nil.

UN SOUND FOOD.

The following articles of unsound food were condemned during the year as unfit for human consumption :—

<i>Article.</i>	<i>Weight.</i> lbs.
Meat (canned)	1,338
Soups (canned)	242
Fish (canned)	748
Jams (canned)	451
Cereals (canned)	30
„ (loose)	4,150
Fruits (canned)	1,298
Milks (canned).....	1,968
Vegetables (canned)	1,978
„ (loose)	273
Sauces	104
Butter	204
Bacon.....	162
Meat.....	835
Cheese	270
Lard	91
Fish	70
Bread	1,948
Miscellaneous	885
	<hr/> 17,045 lbs. <hr/>

The miscellaneous articles include various small quantities of confectionery, sweets and pudding mixtures.

Total weight of food condemned :—7 tons, 2 cwts., 21 lbs.

FACTORIES ACT, 1937.

(In accordance with Circular 2/50 of the Ministry of Health).

1. INSPECTIONS for purposes of provisions as to health.

Premises.	No. on Register.	Number of		
		Inspections.	Written Notices.	Occupiers prosecuted.
(1) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by the Local Authorities	128	106	5	—
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	921	472	92	—
(3) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	—	—	—	—
TOTAL	1,049	578	97	—

2. CASES IN WHICH DEFECTS WERE FOUND.

Particulars.	Number of cases in which defects were found.				Number of cases in which prosecutions were instituted.
	Found.	Remedied.	To H.M. Inspector.	By H.M. Inspector.	
Want of cleanliness (S.1)	16	9	—	2	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4) ...	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7)—					
(a) insufficient.....	5	2	—	5	—
(b) unsuitable or defective...	96	65	—	21	—
(c) not separate for sexes...	10	9	—	3	—
Other offences against the Act (not including offences relating to outwork)	2	2	2	—	—
TOTAL	129	87	2	31	—

OUTWORKERS.

Section 110—

Number of outworkers in August list required by Section 110 (1).....	341
Nature of work—Making, etc., of wearing apparel	208
Brass and brass articles	133
Number of cases of default in sending list to the Council	Nil
Number of prosecutions for failure to supply lists	Nil

Section 111—

Number of instances of work in unwholesome premises	Nil
Number of notices served	Nil
Number of prosecutions in respect of outworkers' premises	Nil

STATISTICS.

The following tables are included to give some idea of the nature and extent of the work carried out during the year and a comparison is made with last year's figures :—

<i>Nature of Inspections.</i>	<i>Totals.</i>	
	1948.	1949.
Sanitary Defects (roofs, gutters, drains, etc.) under Public Health Act and Housing Act	45,960	44,650
Sublet Houses	138	154
Seamen's Lodging Houses	14	7
Common Lodging Houses	25	33
Factories.....	530	578
Shops Acts Inspections.....	2,786	1,968
Public Conveniences	584	550
Dairies	149	183
Milk Shops.....	86	66
Food Manufacturing Premises.....	69	101
Butchers' Shops	159	349
Fish and Chip Shops.....	49	73
Restaurants.....	26	76
School Meals Kitchens	93	133
Factory Canteens	12	55
Bakehouses	69	83
Ice Cream Shops	93	391
Ships <i>re</i> Importation of Dogs and Cats	18	4
Piggeries	31	38
Dysentery Cases	82	36
Food Poisoning	79	54
Unsound Food	606	581
Meat Inspections (Schools)	—	880
Market Stalls.....	—	278
Horse Meat Shops.....	—	31
Greengrocers	—	34
TOTAL INSPECTIONS	51,658	51,224

List of Samples Taken.

	1948.	1949.
Food and Drugs Act Samples other than Milk	433	406
Milk for T.B. Test	384	493
„ Phosphatase Test.....	337	358
„ Methylene Blue Test.....	337	358
„ Fats and Solids-not-Fats, &c.	1,309	1,183
Fertiliser and Feeding Stuffs Act Samples	4	8
Pharmacy and Poisons Act Samples.....	5	2
Water Supply Samples	149	84
Swimming Bath Water Samples	128	132
TOTALS	3,086	3,024

Complaints, Notices, Letters, etc.

	1948.	1949.
Complaints Received	12,129	11,890
Statutory Notices Issued	11,111	10,159
„ „ Abated.....	9,532	8,078
Intimation Notices Issued	1,824	1,967
„ „ Abated	1,693	1,518

Cases Heard before the Magistrates.

Offence.	No. of Cases.	Decision of Magistrate.
PUBLIC HEALTH ACT, 1936 :		
(i) For failing to comply with the requirements of Notices under Section 93 of the P.H. Act to remedy nuisances at dwelling-houses.	185	99 Orders to abate nuisances. 67 cases withdrawn. 19 cases adjourned <i>sine die</i> .
(ii) For exchanging toys for rags with a child...	1	Fined £1 15s. 0d. with 5s. costs.
FOOD AND DRUGS ACT, 1938 :		
(i) For keeping insanitary food premises.....	2	1 fined £20. 1 fined £4.
(ii) For selling unsound sweet-meats.....	1	Fined £10.
(iii) For selling a food not of the nature, substance and quality of the article demanded.	1	Fined £5 with £5 5s. 0d. costs.
(iv) For applying a false label to a food.....	1	Fined £10.
(v) For selling milk deficient 28·3 per cent. milk fat.	1	Fined £2 with £2 2s. 0d. costs.
(vi) For selling a drug (mercurial ointment) not of the quality demanded.	1	Fined £2 with £1 1s. 0d. costs.
(vii) For applying a false label to a drug (mercurial ointment).	1	Fined £1 with £1 1s. 0d. costs.

The total number of cases was 194 as compared with 237 in the year 1948,

CITY ANALYST'S REPORT.

SUMMARY OF SAMPLES.

Food and Drugs Act Samples from the City of Salford (including three "Appeal to Cow " Samples)	1,589
Food and Drugs Act Samples from the Borough of Eccles.....	184
Food and Drugs Act Samples from the Borough of Stretford.....	179
Tests on Heat Treated Milks (from all sources).....	427
Fertilisers and Feeding Stuffs Act Samples.....	8
Pharmacy and Poisons Act Samples	2
Waters (including Swimming Bath Waters).....	254
Contract Samples examined for the Purchasing Committee.....	103
Other Miscellaneous Samples	53
Tests connected with Investigations of Atmospheric Pollution.....	3,867
Total	6,666

PART I.

FOOD AND DRUGS ACT, 1938.

(City of Salford).

During the year 1,589 samples were submitted for analysis under the above Act. Table 1 shows the nature and number of samples submitted with the number reported genuine and the number adulterated. Of the 1,589 samples examined, 282 were sealed (having been divided in accordance with the provisions of Section 70 of the Food and Drugs Act, 1938), and 1,307 were unsealed or informal samples.

TABLE 1.
FOODS.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per Cent. Adulteration.
		Preservatives Only.	Other Ways.	
Milk	1,183	—	37	3.1
Apple Juice	2	—	—	—
Baking Powder	3	—	—	—
Batter Flour	1	—	—	—
Beef Sausage	6	—	1	16.7
Beef Sausage Meat.....	1	—	—	—
Blackcurrant Syrup	1	—	—	—
Butter	32	—	—	—
Cake Mixture	4	—	—	—
Cheese	32	—	—	—
Chocolate Ice Cream	1	—	—	—
Cocoa	7	—	—	—
Coffee	6	—	—	—
Coffee and Chicory Essence	3	—	—	—
Condensed Milk	7	—	—	—
Cooking Fat	32	—	—	—
Crab Paste	3	—	—	—
Curry Powder	2	—	—	—
Custard Mix	1	—	—	—
Custard Powder	4	—	—	—
Dessert Powder	2	—	—	—
Diabetic Apricot Jam.....	1	—	—	—

TABLE 1—Continued.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Diabetic Marmalade	1	—	—	—
Fish Paste	2	—	—	—
Flour	4	—	—	—
Golden Raising Powder.....	2	—	—	—
Golden Syrup	2	—	—	—
Ground Ginger	2	—	—	—
Ice Cream	30	—	—	—
Jam	10	—	—	—
Lemonade Tablets	2	—	—	—
Margarine	32	—	—	—
Marmalade	3	—	—	—
Meat Paste	3	—	—	—
Mock Rice	1	—	—	—
Non-Brewed Vinegar	3	—	1	33.3
Oatmeal	2	—	—	—
Orange Juice	2	—	—	—
Pastry Mix	1	—	—	—
Pearl Barley	5	—	—	—
Potato Crisps	3	—	—	—
Processed Peas	5	—	—	—
Refined Fat	1	—	—	—
Rolled Oats	2	—	—	—
Sago	2	—	—	—
Salad Cream	3	—	—	—
Salad Dressing	1	—	1	100.0
Sandwich Spread	2	—	—	—
Self-Raising Flour	5	—	1	20.0
Semolina	4	—	—	—
Sugar	32	—	—	—
Sweets	3	—	—	—
Tea	25	—	—	—
Thirst Quenchers	1	—	1	100.0
Tin Greaser	1	—	—	—
Tomato Ketchup	3	—	—	—
Tomato Sauce	3	—	—	—
Treacle	1	—	—	—
Vant Ice	1	—	—	—
Vitamin Fruit Rings	2	—	2	100.0
Whale Meat Cutlets	1	—	—	—
White Pepper	2	—	—	—
Total Foods.....	1,544	—	44	2.8

DRUGS.

Bicarbonate of Soda	2	—	—	—
Borax	1	—	1	100.0
Camphorated Oil	2	—	—	—
Cod Liver Oil	1	—	—	—
Cod Liver Oil Emulsion.....	1	—	—	—
Cod Liver Oil Emulsion with Hypophosphites	1	—	—	—
Compound Mercury Ointment B.P.	2	—	2	100.0
Epsom Salts	7	—	—	—
Fuller's Earth Cream.....	1	—	—	—
Glauber's Salt	6	—	1	16.7

TABLE 1—Continued.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Laxative	2	—	—	—
Malt Extract	1	—	—	—
Mercurial Ointment	5	—	4	80.0
Olive Oil	2	—	—	—
Rochelle Salts	3	—	—	—
Seidlitz Powders	2	—	—	—
Sulphur Tablets	1	—	—	—
Tincture of Iodine	1	—	—	—
Yeast and Sulphur Tablets	1	—	—	—
Zinc Ointment	3	—	—	—
Total Drugs.....	45	—	8	17.8
Total Foods and Drugs.....	1,589	—	52	3.3

TABLE 2.

PERCENTAGE OF ADULTERATION—SALFORD.

Year.	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Percentage of Adulteration...	6.9	7.2	6.1	3.7	3.1	3.9	3.3	3.0	5.3	3.3
Total Samples....	1,344	1,296	1,512	1,555	1,513	1,628	1,742	1,651	1,742	1,589
Formal Samples	406	427	464	499	427	385	389	315	289	282
Informal Samples	714	753	884	833	891	1,077	1,205	1,178	1,289	1,119
Private Samples	224	116	164	223	195	166	148	158	164	188
No. of Samples per 100,000 of the population	685	748	946	1,014	989	1,045	1,022	942	985	888

Calculated on civil population only from 1941 onwards.

TABLE 3.

ADULTERATION OF MILK—SALFORD.

Year.	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
No. of Samples...	919	883	995	1,107	1,074	1,147	1,275	1,190	1,309	1,183
Percentage of Adulteration...	5.4	5.7	6.2	3.1	1.9	3.5	3.6	2.6	5.1	3.1

TABLE 4.

AVERAGE COMPOSITION OF ALL MILK (INCLUDING APPEAL TO COW SAMPLES).

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	333 {	12.17 {	3.43 {	8.74 {
February				
March				
April	277 {	12.19 {	3.40 {	8.79 {
May				
June				
July	295 {	12.26 {	3.53 {	8.73 {
August				
September				
October	278 {	12.42 {	3.63 {	8.79 {
November				
December				
	1,183	12.25	3.49	8.76

TABLE 5.

AVERAGE COMPOSITION OF FARMERS' MILK (INCLUDING APPEAL TO COW SAMPLES).

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	105 {	12.19 {	3.44 {	8.75 {
February				
March				
April	97 {	12.30 {	3.48 {	8.82 {
May				
June				
July	101 {	12.32 {	3.60 {	8.72 {
August				
September				
October	115 {	12.42 {	3.64 {	8.78 {
November				
December				
	418	12.31	3.54	8.77

TABLE 6.

AVERAGE COMPOSITION OF MILK OTHER THAN FARMERS' MILK.

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	228 { 82 75 71	12·15 { 12·23 12·10 12·12	3·42 { 3·48 3·38 3·40	8·73 { 8·75 8·72 8·72
February				
March				
April	180 { 72 75 33	12·12 { 12·09 12·15 12·14	3·36 { 3·39 3·34 3·32	8·76 { 8·70 8·81 8·82
May				
June				
July	194 { 86 37 71	12·23 { 12·09 12·25 12·47	3·49 { 3·42 3·56 3·62	8·74 { 8·67 8·69 8·85
August				
September				
October	163 { 51 60 52	12·42 { 12·49 12·46 12·30	3·62 { 3·68 3·65 3·51	8·80 { 8·81 8·81 8·79
November				
December				
	765	12·23	3·47	8·76

TABLE 7.

AVERAGE COMPOSITION OF ALL MILK—SALFORD.

Year.	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Fat.....	% 3·66	% 3·69	% 3·66	% 3·63	% 3·64	% 3·59	% 3·55	% 3·52	% 3·48	% 3·49
Non-fatty Solids..	8·70	8·65	8·63	8·69	8·73	8·66	8·70	8·71	8·76	8·76
Total Solids	12·36	12·34	12·29	12·32	12·37	12·25	12·25	12·23	12·24	12·25

TABLE 8.

AVERAGE BUTTERFAT CONTENT OF MILK—SALFORD.

Year.	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
All Milks	% 3·66	% 3·69	% 3·66	% 3·63	% 3·64	% 3·59	% 3·55	% 3·52	% 3·48	% 3·49
Farmers' Milks...	3·70	3·71	3·71	3·62	3·74	3·65	3·60	3·54	3·51	3·54
Other than Farm- ers' Milks	3·64	3·67	3·64	3·64	3·62	3·57	3·52	3·51	3·46	3·47

It can be seen that there is a slight downward trend in the butterfat content, which may be explained by the present tendency of cow breeders to aim at large yields of milk per cow rather than milk of good quality.

TABLE 9.

The following samples of milk showed figures for non-fatty solids below the presumptive limit of 8.5 per cent. non-fatty solids of the Sale of Milk Regulations, 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test :—

Serial Number	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.	Freezing Point °C. (Hortvet)	Acidity °Richmond.
B1656	11.15	2.70	8.45	—0.546	15
A1194	11.47	3.15	8.32	—0.542	17
A1195	11.31	3.00	8.31	—0.547	18
A1196	11.33	3.05	8.28	—0.547	18
A1213	10.86	2.60	8.26	—0.537	17
B1799	11.21	2.90	8.31	—0.542	15
A1240	11.15	2.80	8.35	—0.539	15
A1242	11.25	2.95	8.30	—0.539	16
A1243	11.30	2.85	8.45	—0.539	15
A1244	12.28	3.95	8.33	—0.538	15
A1245	11.36	2.90	8.46	—0.536	15
B2004	11.53	3.20	8.33	—0.534	17
B2009	11.34	3.00	8.34	—0.537	17
A1346	12.45	4.05	8.40	—0.534	16
A1347	11.37	2.95	8.42	—0.536	16
A1372	12.24	3.90	8.34	—0.549	18
B2463	11.68	3.20	8.48	—0.544	16
B2464	12.02	3.60	8.42	—0.539	16
B2465	11.54	3.15	8.39	—0.544	16
B2467	11.77	3.30	8.47	—0.549	17
B2468	11.51	3.15	8.36	—0.543	17
B2596	12.10	3.70	8.40	—0.540	18
B2687	11.75	3.40	8.35	—0.531	15
B2689	11.69	3.60	8.09	—0.534	15
B2690	12.00	3.80	8.20	—0.536	15
B2921	11.52	3.35	8.17	—0.549	16
B2922	11.70	3.55	8.15	—0.549	16

Samples with letter A are formal, and with letter B informal samples.

TABLE 10.

MILK ADULTERATION.

No.	Nature of Adulteration, etc.	Action taken.	Remarks.
B1656	Deficient 10.0% milk fat	Formal samples taken.....	See Sample A1213 below and special observations.
A1213	Deficient 6.6% milk fat	Farmer written	See special observations.
B1676	Deficient 6.6% milk fat	} Producers written.....	Represented two out of six cans, the remaining four being particularly rich in fat. The producers were urged to distribute the strippings and fore milk more evenly.
B1680	Deficient 6.6% milk fat		
B1696	Contained 2.5% extraneous water..... Freezing Point (Hortvet) —0.522°C.....	} Supplier written. Formal samples genuine	The supplier was warned to take greater care to ensure that no water should gain access to his milk.
B1697	Contained 2.9% extraneous water..... Freezing Point (Hortvet) —0.519°C.....		
B1699	Contained 1.4% extraneous water..... Freezing Point (Hortvet) —0.525°C.....		
A1232	Deficient 10.0% milk fat	Further samples taken.....	See Samples A1246 and A1247 below.
A1246	Deficient 1.6% milk fat	} Supply kept under observation	
A1247	Deficient 6.6% milk fat		
B1799	Deficient 3.3% milk fat	Formal samples taken.....	See samples A1240, A1242, A1243 and A1245 below, and special observations.
A1240	Deficient 6.6% milk fat	} Farmer written	See special observations.
A1242	Deficient 1.6% milk fat		
A1243	Deficient 5.0% milk fat		
A1245	Deficient 3.3% milk fat		
B1894	Deficient 3.3% milk fat	Further samples taken. See Sample B1923 below.	B1894 and B1923 represented only a small proportion of a farmer's milk, the remainder of which was of good quality. He was warned to take steps to ensure efficient mixing so that each can would comply with the Sale of Milk Regulations, 1939.
B1923	Deficient 10.0% milk fat.....	Farmer written.	

TABLE 10—Continued.

No.	Nature of Adulteration, etc.	Action taken.	Remarks.
B1936	Contained 2.7% extraneous water.....	Further samples genuine. Dairy company written and dairy visited.....	Advised to take more active precautions to prevent access of water to the milk.
B1937	Freezing Point (Hortvet) —0.514°C.....		
	Contained 1.1% extraneous water.....		
	Freezing Point (Hortvet) —0.520°C.....		
A1285	Deficient 5.0% milk fat	Farmer written	
A1312	Deficient 28.3% milk fat.....	Prosecution	Fined £2 together with two guineas costs—£4 2s. 0d. in all. See special observations.
B2164	Deficient 6.6% milk fat	Further samples taken	See Samples A1347 and A1348 and special observations.
B2179	Deficient 5.0% milk fat	Further samples taken and found to be genuine.	
B2218	Deficient 3.3% milk fat	Further samples genuine	
B2225	Deficient 3.3% milk fat	Further samples genuine.	
A1347	Deficient 1.6% milk fat	Farmer written	Following Sample B2164. See special observations.
A1348	Deficient 10.0% milk fat.....		
B2395	Deficient 2.1% non-fatty solids.....	Further samples were taken and found to be genuine but of poor quality	Farmer written and asked to seek advice to improve the quality of his milk.
B2572	Deficient 3.3% milk fat	Suppliers notified. Further samples genuine	
B2599	Deficient 10.0% milk fat.....	Further samples genuine.	
A1404	Contained 16.9% extraneous water	Appeal to Cow samples genuine. Legal action taken	Case dismissed, defendant granted £5 5s. 0d. costs. Prosecution unable to prove contract agreement with Milk Marketing Board. See special observations.
A1405	Freezing Point (Hortvet) —0.431°C.....		
	Contained 19.4% extraneous water		
	Freezing Point (Hortvet) —0.424°C.....		
B2938	Deficient 6.6% milk fat	Formal samples taken.....	See Samples A1445 and A1451 below and special observations.
B2942	Deficient 23.3% milk fat.....		
B2946	Deficient 20.0% milk fat.....		
A1445	Deficient 5.0% milk fat	Farmer written	See special observations.
A1451	Deficient 3.3% milk fat		

One thousand, one hundred and eighty-three samples of milk were examined during the year, 418 being samples of farmers' milk of which 415 were taken in course of delivery to wholesalers and retailers in Salford, whilst the remaining three were "Appeal to Cow" samples.

In Table 10 will be found details of 37 samples of milk, all reported as "adulterated or otherwise giving rise to irregularity." The percentage adulteration as shown in Table 3 is 3.1. In most cases the amount of adulteration was only slight, as is shown below, and they were dealt with by warning letters. In the other cases, however, where the adulteration was greater, legal proceedings were instituted, for details of which see special observations in the Remarks column of Table 10.

Milks deficient in fat only.....	29 or 2.4%
Milks containing added water only.....	8 or 0.7%
	<hr/>
	37 or 3.1%
	<hr/>
Milks containing more than 3 per cent. added water.....	2 or 0.2%
Milks 10 per cent. or more deficient in fat.....	3 or 0.3%
No samples of milk contained colouring matter or preservative.	

Before any milk was reported upon as adulterated, as judged by deficiency in non-fatty solids, it was submitted to the Hortvet freezing point test (unless souring had occurred), and any samples with a freezing point less than -0.529°C . were reported as being of poor quality but genuine (see Table 9).

In considering whether the quality of the milk supply is satisfactory or not, the following comparison of milks examined in Salford during the last four years will give rise to grave doubts.

<i>Year.</i>	<i>Total Number of Milks.</i>	<i>Number Naturally Deficient in Non-fatty Solids.</i>	<i>Number Adulterated.</i>
1946	1,275	41	46
1947	1,190	25	31
1948	1,309	41	67
1949	1,183	27	37

The striking fact emerges that each year the number of milks naturally deficient in non-fatty solids is comparable with the number of adulterated samples, and nutritionally the loss is often as great as if the samples were actually adulterated.

In all such cases, the farmers concerned are advised to seek the advice of their local agricultural college with a view to improving the quality of their milk. Despite frequent exhortations of this nature, they continue to take little or no active steps and continue to deliver this poor quality milk to the city.

There is, however, no incentive for them to take active steps to improve the quality of their milk, as they are paid, not for the nutritional value of their milk, but for its volume. It also costs less to produce a milk of poor quality than one of good quality. No legal action can be taken, although, in my opinion, the purchaser is definitely prejudiced, and a further dangerous point also arises, that one of the main symptoms of udder disease of cows is the yielding of poor quality milk.

Special Observations on Adulterated and Abnormal Milk Samples.

Sample B1656, Milk.

This informal sample represented one out of five cans of a consignment of farmer's milk in course of delivery to a city dairy. It was found to be naturally deficient in non-fatty solids and to be deficient in fat to the extent of 10 per cent. when compared with the 3.0 per cent. presumptive minimum limit for fat. Formal samples representing each can of this farmer's consignment were taken at a later date. (Please see next paragraph).

Sample A1213, Milk.

Five formal samples taken in course of delivery were numbered consecutively A1213 to A1217. On analysis they were found to have the following composition :—

<i>Sample</i>	<i>Non-fatty Solids.</i>	<i>Fat.</i>
<i>No.</i>	<i>Per cent.</i>	<i>Per cent.</i>
A1213	8.26	2.60
A1214	8.80	3.30
A1215	8.90	3.20
A1216	8.65	3.00
A1217	8.70	3.45

The freezing-point test showed that sample A1213 was naturally poor in non-fatty solids. It was also deficient in fat to the extent of 13.3 per cent. when compared with the 3.0 per cent. presumptive minimum limit for fat. The farmer was urged by letter to seek advice to improve the quality of his milk, so that each can would comply with the Sale of Milk Regulations, 1939. This is particularly necessary in this case since the contents of each can, being T.T. milk, are separately bottled, and not averaged by mixing with milk from other cans.

Sample B1799, Milk.

This informal sample was one of three informal samples representing three cans only out of a consignment of seven cans in course of delivery from a farmer to a city dairy. On analysis sample B1799 was found to contain only 2.90 per cent. fat and 8.31 per cent. non-fatty solids, but its freezing-point showed that the deficiency in non-fatty solids was due to natural causes. However, since there was also a slight fat deficiency, formal samples of the whole consignment were taken at a later date. (Please see next paragraph).

Samples A1240, A1242, A1243 and A1245, Milk.

Seven formal samples taken in course of delivery were numbered consecutively, A1239 to A1245. On analysis they were found to have the following composition :—

<i>Sample</i>	<i>Non-fatty Solids.</i>	<i>Fat.</i>
<i>No.</i>	<i>Per cent.</i>	<i>Per cent.</i>
A1239	8.50	3.80
A1240	8.35	2.80
A1241	8.50	3.85
A1242	8.30	2.95
A1243	8.45	2.85
A1244	8.33	3.95
A1245	8.46	2.90

In four samples, namely, A1240, A1242, A1243 and A1245, the fat content fell below the minimum presumptive limit (3.0 per cent.). Five of the seven samples were also deficient in non-fatty solids, but the freezing-point test showed that this was due to natural causes. It was deemed sufficient in this case to urge the farmer by letter to seek advice with the object of improving the milk of his herd.

Sample A1312, Milk.

This formal sample represented a one-pint bottle of sterilised milk sealed with a crown cork. On analysis it was found to contain only 2.15 per cent. of fat and (on comparison with the 3.0 per cent. presumptive minimum limit fixed by the Sale of Milk Regulations, 1939), was therefore deficient in fat to the extent of 28.3 per cent. of the said minimum. Legal proceedings were instituted, under Section 83 (3) of the Food and Drugs Act, against the dairy company who processed and bottled the milk, and at the hearing they admitted responsibility. They were convicted and fined £2 with two guineas costs (£4 2s. 0d. in all).

Sample B2164, Milk.

This informal sample represented part of a delivery of a farmer's milk in course of delivery to Salford dairies. On analysis it was found to contain only 2.80 per cent. of fat and was thus deficient (relative to the 3.0 per cent. minimum) to the extent of 6.6 per cent. Formal samples of the whole consignment were taken later. (Please see next paragraph).

Samples A1347 and A1348, Milk.

Six formal samples, numbered consecutively A1346 to A1351, represented the whole consignment from the above farmer in course of delivery to a city dairy. The analysis of the six samples gave the following results :—

<i>Sample No.</i>	<i>Non-fatty Solids. Per cent.</i>	<i>Fat. Per cent.</i>
A1346	8.40	4.05
A1347	8.43	2.95
A1348	8.76	2.70
A1349	8.55	3.70
A1350	8.70	3.75
A1351	8.60	4.00

Samples A1347 and A1348 were thus respectively deficient in fat to the extent of 1.6 and 10.0 per cent. of the minimum presumptive limit of 3.0 per cent. for fat. Samples A1346 and A1347 were found to have a freezing-point indicating them to be genuine milk. The farmer was written and asked to mix his milk more thoroughly so that each can would comply with the Sale of Milk Regulations, 1939.

Samples A1404 and A1405, Milk.

These formal samples of milk were taken on delivery from a farmer to a city dairy. On analysis A1404 was found to contain 16.9 per cent. extraneous water and A1405 to contain 19.4 per cent. extraneous water. Legal proceedings were instituted, and at the hearing the case was dismissed as the contract agreement with the Milk Marketing Board could not be proved. The defendant was awarded five guineas costs.

Samples B2938, B2942 and B2946, Milk.

These informal samples represented three out of five cans of milk consigned together by a farmer to a city dairy. On analysis they were found to contain 2.8 per cent., 2.3 per cent. and 2.4 per cent. of fat respectively, and were therefore deficient in fat, when compared with the 3.0 per cent. minimum presumptive limit fixed by the Sale of Milk Regulations, 1939, to the extent of 6.6 per cent., 23.3 per cent. and 20.0 per cent. of the said minimum limit. To investigate this supply further, formal samples were taken at a later date from each can of the farmer's consignment in course of delivery to the dairy. (Please see next paragraph).

Samples A1445 and A1451, Milk.

Following samples B2938, B2942 and B2946 above, formal samples were taken from each of nine cans and the samples were numbered consecutively A1445 to A1453. On analysis, two samples, A1445 and A1451, were found to be deficient in fat to the extent of 5.0 per cent. and 3.3 per cent. when compared with the 3.0 per cent. minimum presumptive limit for fat. The other seven samples were found to be genuine. The farmer was urged by letter to seek advice from his local agricultural college and to take active steps to improve the milk of his herd.

TABLE 11.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
B2495	Beef Sausage	Deficient 10.0% meat	Manufacturer interviewed.
B2740	Borax	Contained 100 parts per million of arsenic	Packers written.
B2534	Compound Mercury Ointment B.P.	Deficient 0.7% of the minimum amount of mercury required by the B.P.	No action.
B2535	Compound Mercury Ointment B.P.	Deficient 0.5% of the minimum amount of mercury required by the B.P.	No action.
B1851	Glauber's Salt	Consisted of Exsiccated Glauber's Salt.....	Pharmacist written.
B2533	Mercurial Ointment	Consisted of Ointment of Mercury which is three times the strength of Mercurial Ointment.	Formal sample taken. See Sample A1386 below.
A1386	Mercurial Ointment	Consisted of Ointment of Mercury which is three times the strength of Mercurial Ointment.	Legal action taken resulting in the defendant being fined £3 0s. 0d. and £2 2s. 0d. costs.
B2603	Mercurial Ointment	Deficient 0.2% of the minimum amount of mercury required by the B.P.	No action.
B2604	Mercurial Ointment	Deficient 0.2% of the minimum amount of mercury required by the B.P.	No action.
B2489	Non-Brewed Vinegar	Deficient 2.5% acetic acid	Packers written.
B2119	Salad Dressing	In a fermenting condition.....	Manufacturer written.
B2482	Self-Raising Flour	Deficient 12% carbon dioxide.....	Wholesalers written.
B1810	Thirst Quenchers	Unsatisfactory label.....	Referred to Ministry of Food. Formal sample unobtainable.
B2854	Vitamin Fruit Rings	Deficient in Vitamin C.....	Formal sample taken. See Sample A1436 below.
A1436	Vitamin Fruit Rings.....	Deficient 80% in Vitamin C	Legal action taken. See special observations.

Special Observations on Samples other than Milk.

Sample B2740, Borax.

This informal sample of borax was found to contain 100 parts per million of arsenic. This is 95 parts per million in excess of the British Pharmacopoeia (1948) limit for arsenic in medicinal borax. Although there were recommendations on the container for household uses, it would be quite possible for the borax to be used medicinally. The packers were written asking them to amend the labelling to include a clear statement to the effect that the contents of the packet are not to be used for medicinal purposes. Subsequent investigations revealed that the firm had gone into liquidation.

Sample B1851, Glauber's Salt.

This informal sample purchased in a pharmacist's shop, bore a hand-written label with the words "Glauber Salts Powdered." On analysis it was found to consist entirely of Exsiccated Glauber's Salts (a preparation of which the official dose is only one-half that of ordinary Glauber's Salt). A letter has been written to the responsible head pharmacist of the shop in question, asking for an assurance that in future Exsiccated Glauber's Salts will be correctly labelled; the Sampling Officer has also interviewed him and received a verbal undertaking to the same effect.

Samples B2533, B2602, B2603 and B2604, Mercurial Ointment.

These informal samples were purchased as Mercurial Ointment from different pharmacists' shops in the city. Sample B2602 was found to conform to the standard laid down by the British Pharmacopoeia, 1948, namely, that the mercury content is 10.0 per cent. (limits 9.5 to 10.5 per cent.). Samples B2603 and B2604 were slightly deficient in mercury content. Sample B2533, however, contained 29.2 per cent. of mercury and was thus approximately three times the strength indicated by its label "Ung. Hydrarg. Dil. B.P." The British Pharmacopoeia, 1948, also states that "when Mercury Ointment, Mercurial Ointment, or Blue Ointment is prescribed or demanded, Dilute Ointment of Mercury shall be dispensed or supplied, unless, on enquiry, it is ascertained that Ointment of Mercury is required." In view of the possible harmful effects from using this strong ointment without medical supervision, the shop was re-visited and a formal sample procured. (Please see next paragraph).

Sample A1386, Mercurial Ointment.

This formal sample, supplied when Mercurial Ointment was demanded, was found to contain 29.2 per cent. of mercury, thus being roughly three times the strength of the ointment which should have been supplied. Legal proceedings were instituted, and at the hearing the vendor was fined £3 0s. 0d. and £2 2s. 0d. costs, a total of £5 2s. 0d.

Sample B2119, Salad Dressing.

This informal sample was packed in a screw-capped bottle bearing a label which gave a statement of ingredients. On analysis the contents were found to be in reasonable agreement with the statement on the label. The sample, however, was found to be in a state of fermentation. On releasing the screw-cap, the contents exuded and were found to be "gassing" and to have a yeasty odour. The Sampling Officer visited the shop and inspected the stock of salad dressing, all of which was found to be sound. The shopkeeper had had one previous complaint of fermentation in a bottle from the same batch. The manufacturers have been requested by letter to take such precautions as will ensure soundness and stability in their product when offered for sale,

Sample B2482, Self-Raising Flour.

This informal sample contained 0.35 per cent. of available carbon dioxide and when compared with the standard of 0.40 per cent. of available carbon dioxide laid down by "The Food Standards (Self-Raising Flour) Order, 1946," was deficient in carbon dioxide to the extent of 12 per cent. The packers of this commodity were communicated with, and they admitted that it was old stock, agreeing to withdraw it from sale.

Sample B1810, Thirst Quenchers.

This informal sample consisted of tablets about the size and shape of aspirin tablets, prepacked in a paper envelope bearing a printed label. The label included a declaration of ingredients, namely, Lactose, Sugar, Tartaric Acid, Flavouring, Colouring. On analysis the composition was found to be:—

Reducing Sugars (as Lactose monohydrate).....	39.2 per cent.
Sucrose	28.8 „ „
Tartaric Acid	4.4 „ „
Calcium Carbonate	11.8 „ „
Gum, etc., by difference.....	15.8 „ „

Lactose was identified as a major ingredient by separate chemical tests. There appears to be a breach of the Labelling of Food Order inasmuch as the ingredients chalk and gum have not been declared on the label. Both may be regarded by the makers as excipients for the purpose of making the whole mixture suitable for compression in a tablet machine. The opinion of the Ministry of Food was sought and in reply they stated that the above label had not been submitted to them for scrutiny and that a prosecution for infringement of Article 2 (b) of the Labelling of Food Order, 1946, would be in order. A formal sample, however, could not be procured and no further sale of this article has been reported in Salford.

Samples B2854 and A1436, Vitamin Fruit Rings.

These two samples were purchased from the same shop. The informal sample B2854, claimed on the label, "Each fruit ring contains 20 i.u. of Vitamin C," whilst analysis showed that there was only 4 i.u. of vitamin C per fruit ring, there thus being a deficiency of 80 per cent. of the vitamin C claimed to be present. Permission to prosecute has been obtained from the Ministry of Food, and at the hearing before the Stipendiary Magistrate on 23rd June, 1950, the defendants were fined £5 for giving a false label, £5 for giving a label not in accordance with the Labelling of Food Order, 1946, and £4 1s. 0d. costs (£14 1s. 0d. in all).

ICE CREAM.

The Ministry of Food state in Circular MF3-49, that from November 7th, 1948, additional supplies of sugar, and in certain cases fats, have been made available to ice cream manufacturers. To ensure that these materials are used to the best advantage, manufacturers wishing to avail themselves of the additional supplies have been required to sign an undertaking that their ice cream will have a minimum fat content of 2.5 per cent. Local Authorities have been asked by the Ministry to send copies of analyses showing the fat content of any samples of ice cream that may be taken by their officers in the normal course of their duties.

The use of a minimum fat content of 2.5 per cent. for this purpose is not to be interpreted as a proper standard for ice cream. The Food Standards Committee of the Ministry of Food, after consultation with the Local Authorities and the trade associations concerned, recommend that a standard is in principle desirable, but that action should be deferred on account of the scarcity of the necessary ingredients at the present time.

Thirty samples of ice cream and one chocolate ice cream have been examined during the year. Four samples contained less than 2.5 per cent. of fat, whilst eleven samples contained more than 5 per cent., the remainder falling between 2.5 and 5.0 per cent. of fat. For the purpose of the Food and Drugs Act, I have classified ice creams as genuine provided they contain no harmful or deleterious ingredients. From the above I am satisfied that the chemical quality of the ice creams submitted this year is satisfactory when the difficulties of obtaining the necessary ingredients are taken into consideration.

PART II.

BOROUGH OF ECCLES.

During the year, one hundred and eighty-four samples were received from the above Borough for examination under the Food and Drugs Act, 1938. Details of these samples are given in the following table :—

TABLE 12.

SAMPLES EXAMINED.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
FOODS.				
Milk	117	—	21	17.9
Baking Powder	2	—	—	—
Beef Extract	1	—	—	—
Cake Mixture	3	—	—	—
Coffee	2	—	—	—
Cooking Fat	2	—	—	—
Curry Powder	2	—	—	—
Custard Powder	3	—	—	—
Dried Mint	2	—	—	—
Gelatine	2	—	—	—
Gravy Browning.....	2	—	—	—
Ice Cream	12	—	—	—
Jelly	1	—	—	—
Jelly Set	1	—	—	—
Lemon Cheese	1	—	—	—
Lemon Curd	1	—	—	—
Malt Vinegar	1	—	—	—
Meat Essence	1	—	—	—
Mincemeat	3	—	2	66.7
Mixed Spice	2	—	—	—
Non-Brewed Vinegar	1	—	—	—
Oatmeal	3	—	—	—
Pepper	2	—	—	—
Saccharin Tablets	2	—	—	—
Scone Flour Mixture.....	1	—	—	—
Soya Flour	3	—	—	—
Sweetened Dessert Powder	1	—	—	—
Tomato Ketchup	2	—	—	—
DRUGS.				
Glycerine	2	—	—	—
Ground Ginger	2	—	—	—
Liquid Paraffin	2	—	—	—
Olive Oil	2	—	—	—
Total Foods and Drugs	184	—	23	12.5

TABLE 13.

AVERAGE COMPOSITION OF ALL MILK (INCLUDING APPEAL TO COW SAMPLES).

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	40 { 29 5 6	11.64 { 11.52 12.33 11.66	3.23 { 3.19 3.58 3.16	8.41 { 8.33 8.75 8.50
February				
March				
April	34 { 13 18 3	11.97 { 11.75 12.01 12.58	3.33 { 3.28 3.26 3.93	8.64 { 8.47 8.75 8.65
May				
June				
July	20 { 7 8 5	12.15 { 12.18 11.97 12.40	3.54 { 3.42 3.50 3.78	8.61 { 8.76 8.47 8.62
August				
September				
October	23 { 8 7 8	12.14 { 12.41 12.48 11.58	3.50 { 3.64 3.64 3.24	8.64 { 8.77 8.84 8.34
November				
December				
	117	11.92	3.37	8.55

TABLE 14.

AVERAGE COMPOSITION OF ALL MILK (EXCLUDING APPEAL TO COW SAMPLES).

Month	Number of Samples	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	22 { 11 5 6	11.54 { 11.11 12.33 11.66	3.20 { 3.04 3.58 3.16	8.34 { 8.07 8.75 8.50
February				
March				
April	34 { 13 18 3	11.97 { 11.75 12.01 12.58	3.33 { 3.28 3.26 3.93	8.64 { 8.47 8.75 8.65
May				
June				
July	20 { 7 8 5	12.15 { 12.18 11.97 12.40	3.54 { 3.42 3.50 3.78	8.61 { 8.76 8.47 8.62
August				
September				
October	18 { 8 7 3	12.24 { 12.41 12.48 11.23	3.52 { 3.64 3.64 2.93	8.72 { 8.77 8.84 8.30
November				
December				
	94	11.96	3.38	8.58

TABLE 15.

The following samples of milk showed figures for non-fatty solids below the presumptive limit of 8.5 per cent. non-fatty solids of the Sale of Milk Regulations, 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing-point test :—

Serial Number	Formal or Informal	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.	Freezing Point °C. (Hortvet)	Acidity °Richmond
1335	Formal	11.82	3.40	8.42	—0.538	16
1336	Formal	11.87	3.50	8.37	—0.539	16
1338	Formal	12.17	3.80	8.37	—0.542	15
1339	Formal	11.21	2.80	8.41	—0.539	16
1368	Formal	11.21	2.90	8.31	—0.540	17
1370	Formal	11.25	2.95	8.30	—0.543	17
1487	Formal	11.28	3.00	8.28	—0.536	17

TABLE 16.

MILK ADULTERATION.

No.	Formal or Informal.	Nature of Adulteration, etc.	Action taken.	Remarks.
1313	Formal	Contained 8.0% extraneous water..... Freezing Point (Hortvet) —0.477°C....	"Appeal to Cow" samples taken. Legal proceedings instituted	Fined £1 with £10 costs. £11 in all. See special observations.
1315	Formal	Contained 2.0% extraneous water..... Freezing Point (Hortvet) —0.523°C....		"Appeal to Cow" samples following 1313. See special observations.
1316	Formal	Contained 17.0% extraneous water ... Freezing Point (Hortvet) —0.435°C....		
1321	Informal	Contained 3.4% extraneous water..... Freezing Point (Hortvet) —0.527°C....		Informal sample taken by the inspector for his own information.
1330	Formal	Contained 8.3% extraneous water..... Freezing Point (Hortvet) —0.495°C....	Legal proceedings instituted	Defendant fined £1 in respect of each sample, together with £8 17s. 0d. See costs. Total £13 17s. 0d. See special observations.
1331	Formal	Contained 8.3% extraneous water..... Freezing Point (Hortvet) —0.495°C....		
1332	Formal	Contained 5.4% extraneous water..... Freezing Point (Hortvet) —0.511°C....		
1333	Formal	Contained 9.3% extraneous water..... Freezing Point (Hortvet) —0.490°C....		
1334	Formal	Contained 15.5% extraneous water ... Freezing Point (Hortvet) —0.456°C....		
1346	Formal	Contained 3.4% extraneous water..... Freezing Point (Hortvet) —0.502°C....	Farmer was warned to take steps to ensure that no extraneous water gains access to his milk.	

TABLE 16—Continued.

No.	Formal or Informal.	Nature of Adulteration.	Action taken.	Remarks.
1364	Formal	Deficient 5.0% milk fat	Further samples to be taken.	Case dismissed. See special observations.
1368	Formal	Deficient 3.3% milk fat	} Farmer urged to improve the quality of his milk.	
1370	Formal	Deficient 1.6% milk fat		
1374	Formal	Contained 18.3% extraneous water ... Freezing Point (Hortvet) —0.425°C.....	} Legal proceedings instituted	
1393	Formal	Deficient 10.0% milk fat and contained 0.2% extraneous water .....			} Farmer warned to take steps to ensure that no extraneous water gains access to his milk, and to improve its quality.
1394	Formal	Freezing Point (Hortvet) —0.527°C....		
1395	Formal	Deficient 16.5% milk fat.....		
		Deficient 3.3% milk fat		
1429	Formal	Deficient 3.3% milk fat	Farmer warned to mix his milk more thoroughly to ensure that each can comply with the Sale of Milk Regulations, 1939.	
1436	Formal	Deficient 5.7% non-fatty solids.....	} Further samples taken and found to be genuine.	
1438	Formal	Deficient 2.1% non-fatty solids.....		
1486	Formal	Deficient 20.0% milk fat.....	Legal proceedings instituted	Case dismissed. See special observations.

In the following table will be found particulars of various types of milk adulteration and the number of samples under each heading :—

Milks deficient in fat only.....	7 or 6.0%
Milks containing added water only.....	13 or 11.1%
Milks deficient in fat and containing added water.....	1 or 0.8%
	21 or 17.9%
Milks containing more than 3 per cent. added water.....	11 or 9.4%
Milks 10 per cent. or more deficient in fat.....	3 or 2.6%

No samples of milk contained colouring matter or preservative.

TABLE 17.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Formal or Informal.	Description.	Nature of Adulteration or Irregularity.	Remarks.
1481	Informal	Mincemeat	Deficient in Soluble Solids to the extent of 5.4%	Manufacturers communicated with. See special observations.
1488	Formal	Mincemeat	Deficient in Soluble Solids to the extent of 4.3%	

Special Observations on interesting or Adulterated Samples.

Samples 1313, 1315 and 1316, Milk.

Sample 1313, purchased by retail from a farmer, was found on analysis to contain only 7.82 per cent. of non-fatty solids and, on comparison with the 8.5 per cent, presumptive minimum limit for non-fatty solids fixed by the Sale of Milk Regulations, 1939, the deficiency corresponded to the presence of 8.0 per cent. of extraneous water. Visits were made to the farm for the purpose of obtaining "Appeal to Cow " samples. On the first occasion milking had commenced when the inspectors reached the farm, and two cans of milk, represented by samples 1315 and 1316 were already filled. The complete milking yielded six cans represented by samples 1315 to 1320. Samples 1315 and 1316 were found to contain extraneous water. Accordingly another visit was made to the farm and milking was supervised from the start. On this occasion seven samples numbered 1323 to 1329 were taken representing the whole milking, and these samples were found to be genuine milk. Legal proceedings were instituted in respect of sample 1313, and at the hearing the defendant was fined £1 and £10 costs.

Samples 1330, 1331, 1332, 1333 and 1334, Milk.

These samples represented five cans of milk in course of delivery from a farmer to a dairy. They were found on analysis to contain only 7.60, 7.76, 7.99, 7.58 and 7.01 per cent. of non-fatty solids respectively, and on comparison with the 8.5 per cent. presumptive minimum limit for non-fatty solids, they might be presumed to contain 10.5, 8.7, 6.0, 10.8 and 17.5 per cent. of extraneous water. "Appeal to Cow " samples were taken of both morning and evening milkings and were numbered 1335 to 1339 representing five cans. On analysis these "Appeal to Cow " samples, though adjudged genuine from the results of the Hortvet freezing-point test (see Table 15) were found (with one exception, Sample 1337) to be naturally poor in non-fatty solids. The amount of extraneous water calculated

from the presumptive minimum limit would therefore be too high. Since the freezing-points of the "Appeal to Cow" samples were all very close to -0.540°C . the proportion of extraneous water in samples 1330 to 1334 was calculated from their freezing-points, using -0.540°C . as the value before the addition of water. Legal proceedings were instituted in respect of samples 1330 to 1334, and at the hearing the defendant was fined £1 in respect of each sample, together with £8 17s. 0d. costs, making a total of £13 17s. 0d. in all.

Sample 1374, Milk.

This sample represented a one-pint crown-corked bottle of milk purchased by retail. On analysis it was found to contain only 6.94 per cent. of non-fatty solids, corresponding (on comparison with the 8.5 per cent. presumptive minimum limit for non-fatty solids fixed by the Sale of Milk Regulations, 1939) to the presence of 18.3 per cent. of extraneous water. The freezing-point test confirmed the presence of at least that amount of extraneous water. In view of evidence that the cap on the bottle had not been tampered with, legal proceedings were taken against the dairy company supplying the retailer. After a lengthy hearing, the magistrates dismissed the case without order as to costs, on the grounds that there was not sufficient evidence as to who was responsible for adding water to the milk.

Sample 1486, Milk.

Milk No. 1486 was a sample from part of a consignment in course of delivery to an Eccles dairy. On analysis the sample was found to contain only 2.4 per cent. of fat corresponding to a deficiency of 20 per cent. when compared with the presumptive minimum limit of 3.0 per cent. fixed by the Sale of Milk Regulations, 1949. "Appeal to Cow" samples 1489 and 1490 from the evening milking contained 4.10 and 4.20 per cent. of fat respectively. "Appeal to Cow" samples 1491, 1492 and 1493 from the morning milking contained 3.40, 2.80 and 2.60 per cent. of fat respectively, the average fat content from the morning milking being 3.05 per cent. when the quantities of milk were taken into account. Legal proceedings were instituted in respect of sample 1486, and at the hearing the magistrates would not accept the average fat content of the morning milking as representative, but inclined to the view that all the samples from any portion of the milking should contain at least the presumptive minimum amount of fat, *viz.*, 3 per cent. Accordingly they were not satisfied that the "Appeal to Cow" samples showed that it was possible to obtain milk satisfying the regulations from the herd, and dismissed the case without mention of costs.

Samples 1481 and 1488, Mincemeat.

Informal sample 1481 on analysis was found to contain only 61.5 per cent. of soluble solids and on comparison with the 65.0 per cent. of soluble solids demanded by the Food Standards (Preserves) (Amendment) Order, 1946, was 5.4 per cent. deficient in soluble solids. A formal sample 1488 was obtained and on analysis was found to contain only 62.2 per cent. of soluble solids and in view of the above Order was thus 4.3 per cent. deficient in soluble solids. The manufacturers were communicated with and they gave an assurance that they would in future ensure that their mincemeat was up to the standard required.

ICE CREAM.

Twelve samples of ice cream were submitted during the year. To assist in making a return of ice cream analyses to the Ministry of Food, as requested in their Circular MF3-49 dated April 1st, 1949, figures for the percentage of total solids and of fat have been reported, and where the percentage of fat fell below 2.5 per cent. a special note was made. Only one sample of ice cream contained less than 2.5 per cent. of fat. In the absence of any standards for ice cream, all the samples were reported as genuine for the purposes of the Food and Drugs Act, provided they contained no harmful or deleterious ingredients.

PART III.

BOROUGH OF STRETFORD.

During the year, one hundred and seventy-nine samples were received from the above Borough for examination under the Food and Drugs Act, 1938. Details of the samples are given in the following table :—

TABLE 18.

SAMPLES EXAMINED.

SAMPLES.	Number	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives. Only.	Other Ways.	
<u>FOODS.</u>				
Milk	109	—	3	2.7
Arrowroot	2	—	—	—
Bread	1	—	1	100.0
Butter	2	—	—	—
Cheese	2	—	—	—
Coffee and Chicory Essence	2	—	—	—
Colouring	1	—	—	—
Cooking Fat	2	—	—	—
Fish Paste	1	—	—	—
Fruit Sauce	2	2	—	100.0
Gelatine	2	—	—	—
Ice Cream	18	—	—	—
Jam	2	—	—	—
Lemon Flavouring	1	—	—	—
Lolly Ice	1	—	—	—
Margarine	2	—	—	—
Potato Crisps	3	—	—	—
Saccharin Tablets	2	—	—	—
Salad Cream	2	—	—	—
Sauce	1	—	—	—
Sausage	2	—	1	50.0
Sugar	2	—	—	—
Sweets	2	—	—	—
Tomato Sauce	1	—	—	—
<u>DRUGS.</u>				
Cream of Tartar	2	—	—	—
Gregory's Powder	2	—	—	—
Iodine Ointment.....	1	—	—	—
Olive Oil	3	—	—	—
Salicylic Ointment	3	—	2	66.7
Seidlitz Powders	3	—	—	—
Total Foods and Drugs...	179	2	7	5.0

TABLE 19.

AVERAGE COMPOSITION OF ALL MILKS.

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Non-fatty Solids per cent.
January	34 { 11 14 9	12·23 { 12·40 12·17 12·13	3·50 { 3·65 3·44 3·44	8·73 { 8·75 8·73 8·69
February				
March				
April	23 { 9 9 5	12·14 { 12·03 12·36 11·96	3·38 { 3·41 3·42 3·25	8·76 { 8·62 8·94 8·71
May				
June				
July	35 { 12 8 15	12·12 { 12·02 12·39 12·05	3·44 { 3·38 3·72 3·32	8·68 { 8·64 8·67 8·73
August				
September				
October	17 { — 17 —	12·35 { — 12·35 —	3·66 { — 3·66 —	8·69 { — 8·69 —
November				
December				
109		12·20	3·48	8·72

TABLE 20.

MILK ADULTERATION.

No.	Formal or Informal	Nature of Adulteration, etc.	Action taken.	Remarks.
638	Informal	Contained 2·8% extraneous water. Freezing Point (Hortvet) —0·524°C.	Formal samples taken.	Found to be genuine.
764	Informal	Deficient 46% milk fat	Formal samples taken.	Found to be genuine. See special observations.
766	Informal	Deficient 33% milk fat		

In the following table will be found particulars of the various types of milk adulteration and the number of samples under each heading :—

Milks deficient in fat only.....	2 or 1·8%
Milks containing added water only.....	1 or 0·9%
<hr/>	
	3 or 2·7%
<hr/>	
Milks containing more than 3 per cent. added water.....	Nil.
Milks 10 per cent. or more deficient in fat.....	2 or 1·8%
No samples of milk contained colouring matter or preservative.	

TABLE 21.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO
IRREGULARITY.

No.	Formal or Informal.	Descrip- tion.	Nature of Adulteration or Irregularity.	Observations.
801	Informal	Bread	Dark-coloured deposit in the interior of the loaf consisting of carbonised mineral oil or grease.	Baker interviewed. See special observations.
626	Informal	Fruit Sauce	Contained benzoic acid preservative, not declared.	Formal sample taken. See special observations.
637	Formal	Fruit Sauce	Contained benzoic acid, 450 parts per million.	Legal proceedings instituted. See special observations.
739	Informal	Beef Sausage.....	Deficient 8% of the required quantity of meat.	Retailer communicated with. See special observations.
658	Informal	Salicylic Ointment	Ointment base was white paraffin ointment.	Pharmacist notified. See special observations.
659	Informal	Salicylic Ointment	Ointment base was white paraffin ointment.	Pharmacist notified. See special observations.

Special Observations on Interesting or Adulterated Samples.

Samples 764 and 766, Milk.

These two informal samples were part of a consignment of six cans, consigned to a dairy. On analysis, sample 764 was found to contain 1.60 per cent. of fat and sample 766 to contain 2.00 per cent. of fat and on comparison with the presumptive minimum limit of 3.0 per cent. for fat, required by the Sale of Milk Regulations, 1939, were 46 per cent. and 33 per cent. deficient in fat respectively. The remaining samples of this consignment were found to be genuine. Formal samples obtained next day were found to be genuine. The dairy was communicated with and have made arrangements for a more thorough mixing of the milk to ensure that all the milk will be in compliance with the Sale of Milk Regulations, 1939.

Sample 801, Bread.

This sample was submitted to the food inspector by the consumer with the complaint that the bread contained vermin excrement. The pocket of dark coloured matter, which had led the consumer to make the complaint, on analysis was found to consist of a mixture of bread (86 per cent.) with mineral oil or grease (14 per cent.), which had become carbonised on baking. When interviewed, the baker admitted that oil had gained access to the dough from the mixing machine and gave assurances that there would be no re-occurrence of this happening.

Samples 626 and 637, Fruit Sauce.

Informal sample 626 on being tested for preservative was found to contain benzoic acid. This was a contravention of the Public Health (Preservatives, etc., in Food) Regulations, 1929, since no declaration of the presence of benzoic acid was made. A formal sample, No. 637, was obtained and analysis showed it to contain 450 parts per million of benzoic acid which is in excess of the 250 parts per million permitted by the above Regulations if its presence had been declared, which was not the case. Accordingly, legal proceedings were instituted and at the hearing the case was dismissed due to the product having passed through so many hands with a succession of warranties that it was impossible to decide who was responsible for the offence.

Sample 739, Beef Sausage.

This informal sample was found, on analysis, to be deficient of 8 per cent. of the required quantity of meat. This opinion is based on the minimum meat content of 50 per cent. prescribed by The Meat Products, Canned Soup and Canned Meat (Control and Maximum Prices) Order, 1948. The retailer was written to and he communicated with his suppliers, who expressed surprise at the deficiency, and intimated that they would take steps to see that it would not happen again.

Samples 658 and 659, Salicylic Ointment.

These two informal samples purchased at different pharmacists' shops, were found on analysis to comply reasonably with the requirements of the British Pharmacopoeia for salicylic acid (namely, 2 per cent.), but were made with a base of white paraffin ointment instead of ointment of wool alcohols. The composition of the samples was thus in accordance with the B.P., 1932, but not with the B.P., 1948. The 1932 formula was changed in 1945 by the Seventh Addendum to the B.P., 1932, and the ointment should thereafter be made with a base of ointment of wool alcohols. This 1945 requirement remained unchanged in the B.P., 1948. The samples were thus four years "out of date" as to the base. The attention of the two pharmacists was drawn by letter to the requirements of the Pharmacopoeia.

ICE CREAM.

Eighteen samples of ice cream were submitted during the year. To assist in making a return of ice cream analyses to the Ministry of Food, as requested in their circular MF3-49, dated April 1st, 1949, figures for the percentage of total solids and of fat have been reported, and where the percentage of fat fell below 2.5 per cent. a special note was made. Three samples of ice cream contained less than 2.5 per cent. of fat and of these one sample was found to contain no measurable amount of fat, and though this sample was regarded as very unsatisfactory, in the absence of any standard for ice cream all the samples were reported as genuine for the purposes of the Food and Drugs Act. None of the samples contained any harmful ingredients.

PART IV.**HEAT-TREATED MILK.**

The issue of The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, S.R. & O., 1949, No. 1589, has necessitated the setting up of a special test, "The Turbidity Test" for sterilised milks. This test depends on the fact that milk albumins are coagulated at the sterilisation temperature and that they are soluble in a half-saturated solution of ammonium sulphate when not coagulated, whereas globulins and casein are insoluble in the above solution. The milk is shaken with ammonium sulphate solution, filtered, and the colour filtrate heated. No turbidity will be observed if the albumin has been coagulated by the heat of sterilisation, thus showing that the milk has been properly sterilised. All pasteurised milks are submitted to the phosphatase test as carried out in previous years.

The percentage of milks failing to satisfy these tests is the lowest since the commencement of this work.

Proportion of Failures to Total Samples.

(City of Salford).

	1945.	1946.	1947.	1948.	1949.
Total samples (including pasteurised, H.T.S.T. and sterilised milk)	198	285	276	325	382
Failures	14.1%	9.8%	4.0%	4.6%	3.7%

Phosphatase and Turbidity Tests on Milk Samples submitted by the City of Salford.

In addition to the milk samples examined under the Food and Drugs Act, 1938, 392 samples were submitted for examination by the phosphatase test or turbidity test. The results obtained in these samples are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised	369	355	5	9
Heat-treated	5	5	—	—
Sterilised	18	18	—	—
	392	378	5	9

One sample of pasteurised milk was submitted by the Borough of Eccles. It was examined by the phosphatase test and found to be sufficiently heat-treated.

Phosphatase Tests on Milk Samples submitted by the Borough of Stretford.

In addition to the milk samples examined under the Food and Drugs Act, 1938, 43 samples were submitted for examination by the phosphatase test. The results obtained on these are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised	16	15	1	—
Heat-treated	27	26	1	—
	43	41	2	—

PART V.

Fertilisers and Feeding Stuffs Act, 1926.

Four informal samples of fertilisers and four informal samples of feeding stuffs have been examined during the year. All these samples with the exception of one feeding stuff satisfied the requirements of the Act. This unsatisfactory sample was slightly deficient in albuminoids and contained an excess of fibre. Arrangements have been made to take formal samples of this source of supply.

PART VI.

Pharmacy and Poisons Act, 1933.

Two samples of ammonia solution have been examined during the year. One of the samples was found on analysis to be 13.6 per cent. deficient in ammonia (NH₃). The declared strength printed on the label was 20 per cent. strong ammonia and no indication was given as to whether the percentage was weight in weight, weight in volume, or volume in volume, the deficiency mentioned above being calculated on a weight in weight basis. Whichever way the percentage of ammonia is expressed, however, the sample would be classified in Part II. of the Poisons List, 1949, and therefore must conform to special provisions as to labelling, which were not complied with in the case of the above sample, no indication of its poisonous nature being given. The packers were communicated with and in reply stated that they had ceased to market this product. The other sample was satisfactory both as regards labelling and composition.

PART VII.

WATER ANALYSIS.

Salford Drinking Water.

Eighty-four samples of drinking water were examined during the year. This number includes twenty-two samples submitted for the usual monthly full chemical analysis of the public supply. Other samples included in the total were examined only for total residual chlorine which was of interest in relation to bacteriological samples taken at the same time, or were examined for special purposes such as the presence of metals, fluorides, etc.

Water is supplied by Manchester Corporation Waterworks from service reservoirs at Prestwich (Thirlmere water), at Gorton Lower (Longdendale water), and Audenshaw (mixture of Thirlmere and Longdendale water). Water is supplied to Pendleton and Broughton from the Prestwich reservoir whilst the water supplying the remainder of the city is a mixture of the Thirlmere and Longdendale water. Average figures of analysis, compiled from monthly analyses are as follows :—

TABLE 22.

(All results except pH value are expressed as parts per million).

Area of Distribution.	PRESTWICH SUPPLY.	MIXED SUPPLY.
	Pendleton and Broughton	Salford Township Area.
Total Solid Matter	43.4	69.5
Nitrates (as N)	0.30	0.54
Nitrites (as N)	Trace	Faint Trace
Combined Chlorine (as Cl)	6.7	9.1
Residual Chlorine (as Cl)	0.03	0.05
Free and Saline Ammonia (as N)	0.01	0.03
Albuminoid Ammonia (as N)	0.04	0.05
Oxygen absorbed	15 mins. 3 hours	0.31 0.65
from acid per-		
manganate at room temperature.		
Temporary Hardness	14.5	13.7
pH Value	7.1	6.9
Physical Characteristics	Clear, very slightly yellow. Faint earthy odour when warmed.	Faintly turbid or opalescent, slightly yellow. Faint earthy odour when warmed. Slight deposit.
Microscopical appearance of Deposit	(Typically). A few diatoms and algal cells.	(Typically). Fine mineral particles, a little vegetable debris, a few diatoms and algal cells.

The pH value of the waters has been regularly maintained near 7.0. All the samples submitted were found to be practically free from lead and to contain less than 0.1 parts per million of fluorine. Judged on chemical composition the water supplies may be accepted as wholesome and of high quality.

Miscellaneous Water Samples.

Five samples of drinking water were analysed for the Borough of Prestwich and found to be of satisfactory chemical purity. Two of the samples, however, were low in pH value and might be plumbo solvent if left long in contact with lead pipes.

Two samples of water from St. Joseph's School, Salford, were submitted as a result of the Headmaster's complaint that there were "live things darting about in the water." The "live things" were found to be Cyclops Quadricornis, which are often found in upland surface waters not filtered before delivery. A sample drawn at Regent Road was also found to contain these aquatic insects. Cyclops are harmless, and since the water supply of Manchester and Salford is not filtered their presence at certain seasons of the year is always a possibility. The fitting of filters to the taps was recommended.

Two samples of water were submitted by the Port of Manchester Health Authority taken from different ships' tanks. On analysis they were found to be of satisfactory chemical purity, but had rather a peculiar taste derived from the cement of the ship's tanks.

Six samples of stream water were submitted by the Borough Engineer of Stretford in connection with their action on Portland cement. Since these samples contained relatively high amounts of sulphate, which would have a deleterious action on cement, the use of aluminous cement was recommended as this latter is immune to attack by sulphates.

Six samples of stream water were submitted by the Chief Sanitary Inspector of the Borough of Stretford with the complaint that in the dry weather when the water level of the stream was low, a strong sulphurous odour was given off. On analysis quite a large amount of sulphuretted hydrogen was found to be present, probably arising as a result of bacterial attack on sulphur compounds present in the stream.

Swimming Bath Waters.

At nearly all the public baths in Salford the system of continuous purification is in use, and samples were examined with the Ministry of Health recommendations in view ("Purification of the Water of Swimming Baths, 1929").

It is now generally recognised that it is desirable to maintain a small excess of active free chlorine over and above the amount of combined chlorine in the form of chloramines, particularly when the number of bathers is high. It has also been found that a direct test for free ammonia on the samples is a very useful indication of whether chlorination is keeping pace with pollution due to bathers.

One hundred and thirty-two samples were examined during the year. Samples were taken from the baths in use at least once a month and in cases when the water was unsatisfactory the Baths Superintendent was notified and further samples taken until a satisfactory level of chlorination was established.

It became obvious at the height of the season that chlorination was not keeping pace with the pollution as was evidenced by the continued presence of nitrites and free ammonia in certain baths. Since very little is known at the present time of the part played by swimming baths in the spread of water-borne diseases, a policy of much more vigorous and regular chlorination should be applied in the summer months,

In addition to the 132 samples examined for the City of Salford, 16 samples were examined from the Borough of Eccles and the results obtained indicated that satisfactory hygienic conditions were being maintained.

PART VIII.

Contract Samples examined for the Purchasing Committee.

Baking Powder	6
Cocoa.....	6
Cornflour	7
Custard Powder	7
Floor Sweeping Compound.....	3
Floor Polish, D.E. Quality.....	6
Floor Polish, S.C. Quality.....	7
Furniture Cream.....	3
Gelatine	6
Jam	4
Lavatory Cleanser	2
Liquid Metal Polish.....	3
Liquid Soap, Cleansing	6
Liquid Soap, Toilet.....	6
Meat Extract	6
Scouring Powder.....	6
Soap, Carbolic.....	3
Soap, Pale.....	3
Soap, Soft.....	4
Soap, Toilet.....	4
Soap Powder, No. 1.....	2
Turpentine Substitute.....	3
	<hr/>
	103
	<hr/>

The number of samples examined on behalf of the Purchasing Committee is nearly double that of last year. This service ensures that articles purchased by various Corporation Departments satisfy specifications which are formulated by the City Analyst, thus enabling strict analytical control to be exercised with its manifold advantages.

PART IX.

TABLE 23.

Unclassified Miscellaneous Samples.

1. General	13
2. Biochemical	6
3. Toxicological.....	3
4. Health Department.....	12
5. Other Corporation Departments.....	8
6. Police	11
	<hr/>
	53
	<hr/>

1. General.

The thirteen samples comprised foodstuffs, oat-feed animal feeding stuff, sewage and a hair remover. Included amongst the foodstuffs was a sample of canned corn beef submitted with the complaint that it had a metallic taste. On analysis it was found to contain 90 parts per million of tin and 50 parts per million of zinc,

2. Biochemical.

The samples analysed under this heading comprised sausage ingredients obtained in connection with an investigation conducted to devise a satisfactory technique of carrying out the "precipitin" test for the detection of the presence of horseflesh in meat products.

3. Toxicological.

These samples included samples of meat, stomach contents, and brewed tea which were examined for poisons. The stomach contents and the brewed tea were free from harmful ingredients. The samples of meat were found to contain phosphorous and their consumption would probably have had a fatal effect.

4. Health Department.

The most interesting of these samples was a sample of bread, which showed evidence of the dough having been contaminated with mortar, this being evident by the presence of a large amount of sand and lime in the baked product.

5. Other Corporation Departments.

These samples were submitted by the Weights and Measures Department, City Engineer, Education Department, and the Cleansing Department.

6. Police.

These samples consisted mainly of "petrol" being examined by special tests to ascertain whether they were Commercial Motor Spirit within the meaning of the Motor Spirit Regulations, 1948.

PART X. ATMOSPHERIC POLLUTION.

Measurement of Daylight.

Since 1926, experiment and tests have been carried out daily in these laboratories to find suitable methods for the estimation of the loss of daylight and ultra-violet radiation caused by the smoke pall overhanging an industrial area.

The present tests in operation at Regent Road, Salford, are the Campbell Stokes Sunshine Recorder, the acidulated potassium iodide method, the nitrite method of Gillam and Morton, and the Ashworth U.V. meter, the latter in contradistinction to its use in the proposed smokeless zones being unbaffled and facing the zenith.

TABLE 24.

1949 Month.	Bright Sunshine (hours) Campbell Stokes' Daily Average.	Acidulated Potassium Iodide. Mgms. I. Liberated. Daily Average.	U.V. Intensity Ashworth Units. Daily Average.
January	0.7	1.4	9.0
February	2.1	3.2	21.1
March	3.8	4.8	29.3
April	3.4	2.5	62.2
May	5.1	5.4	79.0
June	5.4	8.9	140.1
July.....	3.9	8.8	130.3
August	4.6	9.0	80.4
September	3.2	6.6	30.0
October	2.4	2.9	17.9
November	0.6	0.9	17.7
December	0.3	1.7	16.5

The nature and number of " Daylight " Tests made during 1949 :—

Bright Sunshine (Campbell Stokes).....	249
Acidulated Potassium Iodide.....	298
Gillam and Morton Nitrite Test	298
Ashworth's U.V. Test.....	1,366
	<hr/>
Total	2,211
	<hr/>

Recent work on the measurement of daylight has revealed many drawbacks in both the Gillam and Morton and the potassium iodide methods, particularly as regards control of the conditions of the test when it is required to compare " intensities " at different places.

SMOKELESS ZONES.

Experiments for the evaluation of ultra-violet light and smoke concentration in the areas possibly scheduled to become smokeless zones were set up in April. Similar experiments are also being conducted at Regent Road and Ringway Airport for comparison purposes. The projected establishment of three smokeless zones designated as below is under consideration.

Zone No. 1 is in the Lower Kersal district and commencing at the junction of Cromwell Road with Lower Broughton Road, is bounded by Cromwell Road, Gerald Road and Whit Lane to the city boundary, thence by the city boundary in a northerly direction to Bury New Road, via Bury New Road, Gt. Clowes Street and Lower Broughton Road to the starting point. The area is approximately 750 acres in extent.

Zone No. 2 is at Weaste around the Buile Hill and Seedley Parks. Commencing at the junction of Stott Lane with Eccles Old Road, the boundary traverses Stott Lane to the Manchester-Eccles railway line, along the south side of the railway to the city boundary at Gilda Brook, along the city boundary to Eccles New Road at Ladywell Hospital, along Eccles New Road to Bolivia Street, over the railway and along Laurel Grove to Tootal Road, via Tootal Road and Liverpool Street to Derby Road, thence via Derby Road and Lower Seedley Road to Langworthy Road and via Eccles Old Road to the starting point. The area is approximately 320 acres in extent.

Zone No. 3 consists of approximately 160 acres adjacent to Bolton Road playing fields. Commencing at the junction of Bolton Road with Charles Street, it is bounded by Charles Street and the continuing footpath to Duchy Road, along the southern boundary to Brindleheath railway sidings and the railway to Swinton and Pendlebury boundary, thence by the city boundary to Bolton Road, returning along Bolton Road to the starting point,

TABLE 25.
Smoke Concentration.

1949. Month.	MILLIGRAMMES PER CUBIC METRE. DAILY AVERAGE.					
	ZONE I.		ZONE II.		ZONE III.	Regent Road.
	Lower Kersal School.	St. Paul's School, Kersal.	Buile Hill Park.	Ladywell Hospital.	Summerville Day Nursery.	
April	0.25	0.16	0.18	0.23	0.22	0.43
May	0.27	0.21	0.25	0.25	0.27	0.58
June	0.18	0.14	0.16	0.16	0.21	0.32
July.....	0.13	0.11	0.13	0.14	0.17	0.29
August ...	0.32	0.30	0.30	0.38	0.36	0.56
September	0.33	0.31	0.31	0.39	0.37	0.55
October ...	0.52	0.46	0.55	0.49	0.53	0.76
November	0.56	0.52	0.50	0.50	0.66	0.86
December	0.52	0.46	0.44	0.42	0.57	0.83

The method of measuring the smoke concentration consists of the passage of a known volume of air through a white filter-paper to separate the solid smoke particles and to collect them as a grey or black stain which is matched against a set of standard stains calibrated at the National Physical Laboratory. Whilst it is yet early to comment on these results, they do show that the method is sufficiently sensitive to detect local variations in smoke concentration.

TABLE 26.

1949. Month.	ULTRA-VIOLET INTENSITY (ASHWORTH UNITS).				
	ZONE I.	ZONE II.		Regent Road.	Ringway Airport.
	Lower Kersal School.	Buile Hill Park.	Ladywell Hospital.		
April	22	22	23	—	33
May	33	30	42	33	58
June	49	46	45	49	66
July	33	39	41	31	56
August	31	33	39	23	56
September.....	11	13	17	12	20
October	10	9	11	9	19
November	10	8	10	8	13
December	8	7	6	9	20

The apparatus used is the Ashworth type circular meter fitted with special ultra-violet glass which allows ultra-violet rays of wave-length 3,600 Angstrom units to pass through it. The apparatus is inclined at an angle of 45° facing the north sky. A series of baffles is arranged so that only light from the north penetrates the meter. The rays which pass through the ultra-violet glass fall upon a graded step-wedge and then upon sensitive paper which records their intensity. The step-wedge is made of brass wire gauze of No. 35 Standard wire gauge woven into a fabric containing 50 wires to the inch, in rectangular mesh, so that there are 2,500 apertures to the square inch. It can be calculated or experimentally determined that this permits 34 per cent. of the rays incident normally to pass. Side by side with the first strip of fine gauge there is a strip of a coarser gauze which transmits 58 per cent. of the external light, and when successive crossed layers of the fine gauze are laid over both, the wedge then reads in steps, with the coarse gauze as unit and with $f=0.58$.

The theory of the wedge is as follows :—

Let I_e = the external intensity of the rays.

I_n = the intensity after passing n layers of the wedge.

f = the fraction of the external light which passes one layer of the wedge.

Then I

$$\frac{I_n}{I_e} = f^n \text{ or } I_e = I_n f^{-n}$$

and applying logarithms we have :

$$\log I_e = \log I_n - n \log f.$$

I_n is the intensity which prints the last visible spot on the sensitive paper and is always the same for the same observer and hence a constant (K), thus :

$$\log_e = K - n \log f.$$

and as f is also constant we have $\log I_e$ linear with n the number of layers through which the rays have passed. To facilitate the reading of the wedge layers a brass plate is attached to the back of the wedge with circular holes drilled through it, one opposite each step of the wedge. Thus after exposure the sensitive paper presents a series of circular spots which become fainter and fainter according to the number of steps through which the light has passed, and the count from the first to the last visible spot gives the number n of the steps of the wedge which the light has been able to penetrate.

It is an easy matter then to obtain a relative value for the external intensity of the ultra-violet rays, from time to time, but an absolute value could only be calculated if the light energy producing one of the spots on the sensitive paper is known. All the intensities given in the above table are relative values only.

The sensitive paper is very pure quality Swedish filtering paper which has been soaked in a 4 per cent. solution of potassium dichromate and dried in the dark. Ultra-violet light acts on potassium dichromate to liberate chromic oxide, which reacts with the organic matter of the filter paper, the dichromate losing oxygen, and a brown stain results. After exposure in the meter the paper is removed and the number of spots read off.

The depth of the colour stain is dependent on the product of the time of exposure (t) and the intensity of the rays (I), that is on S/Idt . Experiments show that the depth of the colour for equal intervals of time is proportional to the intensity of the light.

The above results show that the method is sufficiently sensitive, there being a marked difference between the Salford and the Ringway Airport results. At Ringway there will be approximately the same weather conditions as at Salford and the much higher figures for the ultra-violet intensity confirm that the smoke pall, apart from its dirt and filth aspect, has an adverse effect on health by hindering the penetration of the health-giving ultra-violet rays.

I intend, as soon as the apparatus is made available, to instal an ultra-violet meter in proposed smokeless zone No. III., so that if the smokeless zones are adopted, a complete overall picture of their effect on the atmospheric pollution of the city can be arrived at.

Measurement of Mineral and Tarry Matter in the Atmosphere.

Experiments to measure the above impurities in the city's atmosphere have been continued. Data of this nature has been collected over a number of years together with results obtained from a soot gauge situated at Nab Top Sanatorium, Marple, Cheshire, the deposit from which has always been considerably less than from the gauges in the Salford area. It has become impossible to continue this experiment at Marple and the gauge has had to be removed. It has, however, been set up at Vine Street, Broughton, one of the highest points in Salford and should eventually provide a lot of valuable information concerning the drift of smoke over the city.

In uniformity with the results expressed by other stations, of which there are a number scattered throughout Great Britain, the results are expressed in metric tons per square kilometre. The metric ton is equivalent to slightly more than the English ton, and there are 2.59 square kilometres to the square mile, so that to convert metric tons per square kilometre to English tons per square mile, it is necessary to multiply by 2.55, or roughly two-and-a-half.

TABLE 27.
Soot Gauge Observations.
MONTHLY AVERAGES—METRIC TONS PER SQUARE KILOMETRE.

	Salford : Broughton M.S. School.	Salford : Ladywell Hospital.	Salford : Drinkwater Park.	Salford : Vine Street Broughton.
Rainfall in millimetres.....	65.5	72.9	75.7	85.0
Tar	0.14	0.14	0.07	0.12
Carbonaceous matter } Insoluble other than tar ... } Matter.	2.01	3.20	1.41	2.80
Ash	3.72	5.35	2.26	3.26
Soluble Matter	3.10	3.78	3.31	3.19
Total Solids	8.97	12.47	7.05	9.37
Sulphates } Included in soluble Chlorides } matter.	1.18	1.25	1.18	1.05
	0.53	0.49	0.63	0.48
pH	3.7	3.7	3.5	3.7

The results obtained at Vine Street, Broughton, cannot be compared with the other results as the averages quoted in the table are only for the latter nine months of the year. Since the beginning of 1949 was very dry we have practically the whole year's rainfall spread over only nine months and also since weather enters very largely into the interpretation of soot gauge deposit results, statistical analysis of the results spread over a number of years is the only way to arrive at reliable conclusions. This work is carried out by the Department of Scientific and Industrial Research to whom the results obtained at Salford are regularly submitted. The results do, however, give a good indication of the tons of dirt and debris deposited over Salford in a year, due to the uneconomical and wasteful methods whereby our fuel supplies are consumed, to say nothing of the extra time and money spent in the drudgery of cleaning and in repairing our disfigured and corroded buildings.

Measurement of Sulphur Pollution.

Two hundred and ninety-six tests have been carried out during the year at Regent Road by the volumetric sulphur dioxide method and 23 monthly tests at Regent Road and Ladywell Hospital by the lead peroxide method. In the former process the sulphur dioxide present in the atmosphere is returned as parts per million, while in the latter method, atmospheric sulphur pollution is returned as milligrammes of sulphur trioxide per 100 square centimetres of exposed surface. Both processes show a very striking rise in the winter months, and the volumetric process, by which daily determinations are made, shows exceptionally high figures on still or foggy days, thus demonstrating that the ill effects on people suffering from chest complaints are a result of the smoke pollution of the atmosphere, the mist being merely a medium which prevents the dispersal of poisonous compounds liberated when fuel is consumed under the present conditions.

CARE OF MOTHERS AND YOUNG CHILDREN, DOMICILIARY MIDWIFERY SERVICE, ETC.

Not many changes occurred in the working of the Maternity and Child Welfare Department during 1949.

A new Centre for the Height area was opened at "Ingleside," Oakwood Park, on October 4th. Although far from what one would like a Welfare Centre to be, the new premises are an improvement on the old. The setting of the new Centre is delightful and is much appreciated by the mothers and staff, who are looking forward to the spring and summer months.

Greater use is being made of Encombe Place Centre, both by this Department and the School Medical Department. The necessary alterations required for a Dental Clinic have been completed, but owing to the shortage of dental staff, it has not been possible to start treatment there.

A successful Mothers' Club has been running at Murray Street since February, 1949. The success of this Club is entirely due to the hard work put in by the members of the Health Visiting Staff who attend this Centre. An additional Ante-Natal session and a Child Welfare session have been added to the activities here.

Owing to the difficulty of finding voluntary help, and to the reduction in the numbers of mothers attending, the Ladies Public Health Society decided reluctantly to close the dinner centres at Police Street and Ordsall Clinics. This service had been carried on by the Society for many years and in the years between the two world wars met a real need among the expectant and nursing mothers of the City; but with full employment and family allowances there does not seem to be the same need and the attendances have gradually dwindled. The members of the Ladies Public Health Society have undertaken another service, namely the serving of tea to the mothers at the Ante-Natal sessions, and I have to express my grateful thanks to those ladies, and particularly to Mrs. Lewis and Mrs. Broome, who come to Regent Road Centre, and to Mrs. Joseph Shlosberg and her friends, who help at Murray Street Clinic.

Increasing pressure from the Civic Welfare Department for the release of the premises used at the "Homestead" as a Child Welfare Centre has made it necessary to look for other premises in which to carry on this work. Negotiations were begun for the purchase of Cleveland House, Eccles Old Road, formerly used as a Nursing Home, and it is hoped that this new Centre will be ready for opening early in 1950. It will be possible there to add other activities such as physiotherapy, a breast-feeding clinic, etc., at this Centre.

The number on the waiting lists for the Day Nurseries is now three times the number of places in the existing Nurseries, and it is hoped that the work on the two new Nurseries approved by the Ministry of Health will begin at an early date.

STATISTICS.

The outstanding feature of the statistics for 1949 is that for the first time on record no deaths from conditions associated with pregnancy or childbirth have occurred among the mothers of Salford.

The total number of births in the City was 3,628, giving a birth rate of 20·3 as compared with 21·2 in 1948.

The low infantile mortality rate of 1948—42 per 1,000 live births—was not maintained. The total number of infant deaths was 193, giving a death rate of 53. This is very disappointing and later in the report an analysis of the causes of some of these deaths is given.

The number of stillbirths occurring in the City was 61 in hospital, and 28 occurring at home, giving a stillbirth rate of 23·9.

SUPERVISION OF MIDWIVES AND MATERNITY HOMES.

Sixty Midwives notified their intention to practise during the year, 25 employed by the Council, 25 from Hope Hospital, 10 from Nursing Homes in the City.

Seven Midwives notified their intention to practise as Maternity Nurses.

DOMICILIARY MIDWIFERY SERVICE.

Effect of National Health Service Act, 1946.

The main change brought about by the National Health Service Act is an increase in the number of doctors' cases attended by midwives. In 1948, midwives attended 138 (7 per cent.) doctors' cases and this year the number attended was 258 (15·7 per cent.). This figure does not include 58 cases where the doctor was engaged to provide maternity services, but was *not* present at the delivery.

Co-operation with General Practitioners.

Arrangements were made early in the year for certain general practitioners to attend the Midwives' Ante-Natal Sessions at the Clinics. Since April, two practitioners have been attending regularly, one at Police Street Centre and one at Ordsall Centre. This has given the doctor the use of the facilities at the Centre for blood tests, etc. The doctors have also been able to carry out post-natal examinations at these Centres.

At Ordsall Centre, 23 mothers attended for examination by their own doctor, and 20 post-natal examinations were made. At Police Street the corresponding figures were 20 for the ante-natal but none for post-natal examination.

Resignations and Appointments.

Miss G. Williamson, who had held the appointment of Non-Medical Supervisor of Midwives since 1928, retired on March 31st, and I should like to record here my appreciation of Miss Williamson's long and valuable service. She was a most conscientious officer, and it was due to her tactful handling of the many difficult situations which arose that the service ran so smoothly. The midwives under her charge looked on her as a friend to whom they could come for advice and help rather than as a Supervisor.

Miss E. R. Entwistle, tutor to the Part II Midwifery Training School at Leicester, was appointed to succeed Miss Williamson, and took up her duties on April 6th.

Three midwives resigned from the Service, two to take Health Visitor's training, and one to take up duties as a School Nurse.

Work Carried Out by Domiciliary Midwives.

The number of confinements attended by the Domiciliary Midwives was 1,628 and there were 21 twin deliveries. Gas and air analgesia was administered in 539 cases.

The average number of cases taken by each midwife was 53·7, and in the case of midwives with pupil midwives, 110·0.

In addition to the attendance at the actual confinements, the midwives carried out the following duties :—

Ante-Natal visits to the homes	7,585
Visits during the puerperium	24,517
Supervisory visits by midwives who train pupil midwives.....	2,679
Attendances at Ante-Natal Clinics were	7,473

Night Service.

This scheme continues to be successful. It is now operated between 8 p.m. and 8 a.m. and is much appreciated by general practitioners, midwives, patients and police.

Five hundred and forty-eight cases were delivered during the night service hours.

Notification by Domiciliary Midwives.

The following notifications were received from the Domiciliary Midwives :—

<i>Medical Aid.</i> (a) For Mothers	342
(b) For Infants	187
	—
Total	529
	—

The following is a list of the conditions for which medical aid was sought :—

For the mother :	During the Ante-Natal period	11
	Poor condition of the patient	19
	Abnormal presentation.....	18
	Ante-partum hæmorrhage.....	24
	Delayed first stage of labour	19
	„ second „ „	22
	Uterine Inertia	16
	Retained placenta	7
	Post-partum hæmorrhage	11
	Obstructed labour	3
	Ruptured perineum	135
	Rise of temperature	22
	Abortion.....	14
	Other causes	21
		—
	Total	342
		—
For the baby :	Premature births.....	17
	Discharging eyes.....	98
	Blisters or rash	15
	Jaundice	9
	Asphyxia Neonatorum	9
	Other causes	39
		—
	Total	187
		—

Stillbirths—26.

The causes of these stillbirths were as follows :—

Anencephaly	6	
Hydrocephaly	1	
Death due to ante-partum hæmorrhage	2	
Macerated fœtuses	5	
Premature breech delivery.....	2	
Forceps delivery	2	
Face presentation.....	1	
Cause unknown	7	(Post mortem examination in one case).
	—	
Total	26	
	—	

Neo-Natal Deaths—22.

The causes of these were as follows :—

Atelectasis	5	(Post mortem examination in two cases).
Prematurity	4	
Broncho pneumonia.....	6	
Asphyxia	2	(Post mortem examination in one case).
Icterus.....	1	
Cardiac failure	2	
Intracranial hæmorrhage.....	2	(Post mortem examination in one case).
	—	
Total	22	
	—	

Artificial Feeding of Infants—53.

Fifty-three notifications of the adoption of artificial feeding were received during the year, as compared with 73 the previous year. The reasons given were as follows :—

Poor lactation	28
Medical advice	14
Malformed nipples	3
Patient did not wish to feed baby	4
Patient returned to work	3
Baby would not feed	1
	—
Total	53
	—

Other Notifications in Connection with the Maternity Service.*Ophthalmia Neonatorum—15.*

Fifteen cases of Ophthalmia were notified during the year. Two cases were referred to the Home Nursing Service and two to hospital. All cases recovered.

Pemphigus Neonatorum—2.

Two cases were notified during the year and were referred to the Home Nursing Service. A good recovery was made in each case.

Puerperal Pyrexia—9.

Nine cases were referred during the year as compared with 37 on the previous year. Nursing was undertaken by the Home Nursing Service in four cases and the other five were removed to Hope Hospital.

OBSTETRIC ANALGESIA.

In April, 1949, the transport of Gas and Air Machines was taken over by the Central Garage and Ambulance Service. Previously, by arrangement with the Chief Constable, this service was undertaken voluntarily by the Police, machines and gas cylinders being kept at the three divisional headquarters. I should like to record here my appreciation, and that of the midwifery staff, for the co-operation and prompt attention which was always given by the members of the Police Force during the time they undertook this service.

Post Graduate Courses for Midwives.

Three midwives attended these courses during the year.

Mobile Obstetric Unit.

The Unit was called out on three occasions to cases attended by Municipal Midwives.

There were two cases of post-partum hæmorrhage and one case of post-partum shock. All patients made good progress.

Part II Midwifery Training School.

Twenty-one pupil midwives have taken the Part II Midwifery Training Course this year. In addition, two pupil midwives have had refresher courses of three months duration each.

Nine pupil midwives were in training, December 31st.

Thirteen pupil midwives have become State Certified Midwives.

One pupil midwife decided not to continue when she failed.

Two Municipal Midwives have been approved as practical teachers for pupil midwives by the Central Midwives Board. There are now five approved teachers on the midwifery staff.

INSPECTION OF NURSING HOMES.

There are in the City two Nursing Homes, taking medical and surgical cases, and one Maternity Home. Eight visits were paid to these Homes during the year.

CARE OF MOTHERS AND YOUNG CHILDREN.**Ante-Natal Clinics.**

There are now, in the various Centres throughout the City, 34 ante-natal sessions per month attended by Medical Officers, and 36 sessions per month held by midwives only.

The total attendances at these sessions during the year were :—

Medical Officers' Sessions	5,515
Midwives' Sessions	7,473

One thousand three hundred and fifty-six specimens of blood were taken from expectant mothers attending these clinics. One thousand three hundred and forty-four Kahn tests were carried out, 1,356 were tested for the Rhesus factor (these included 12 specimens taken for General Practitioners and tested for Rhesus factor only), and 1,350 Hæmoglobin estimations were made. Ten mothers (0·7 per cent.) were found to be Kahn and Wasserman positive and were sent for treatment. One hundred and sixty-five (12·9 per cent.) women were found to be Rhesus negative.

Post-Natal Clinics.

Two hundred and fifty-three mothers attended for post-natal examination. This number is disappointing. It is hoped that more mothers will attend in 1950 for this very important examination.

One hundred and ninety-nine reports were received from Medical Practitioners, post-natal examinations were made in 173 cases.

Child Welfare Centres.

Twenty-three sessions are held weekly at these Centres, the total number of attendances being :—

Children under one year 32,692 (34,335 in 1948).
 „ over „ „ 9,252 (9,820 in 1948).

The number of individual children who attended was 5,754 (6,071 in 1948).

The number of consultations held by Medical Officers was 8,974 for children under one year and 3,866 for children between the ages of one and five years.

Definite progress was made in securing new premises for use as Child Welfare Centres with the opening of the Centre at “Ingleside,” Oakwood Park, and the purchase of Cleveland House.

Premature Baby Service.

This service is working most efficiently. The premature baby nurse and midwife co-operate from the birth of the infant.

Premature births (including six stillborn infants)..... 118
 Transferred to hospital 24
 Nursed at home 88

The following is a table of the number of babies nursed entirely at home, giving birth weights and number surviving at different age periods up to the 28th day.

Birth Weight.	Died in first 24 hours.	Died 2nd—7th day.	Died 8th—28th day.	Survived 28 days.	Total.
Under 3 lbs.....	3	—	—	1	4
3 lbs. to 4 lbs.	—	—	2	1	3
4 lbs. to 5½ lbs.	1	6	4	70	81
Total	4	6	6	72	88

Visits paid 1,462.

Fifty-eight babies were referred by hospitals in the area and were visited by the premature baby nurse until well enough to be transferred to the health visitors.

Breast Feeding Clinic.

The report deals with 102 mothers of babies born between July 1st and December 31st, 1948, and 50 mothers of babies born between January 1st and June 30th, 1949. The number of attendances fell in the period from January 1st to June 30th, 1949, giving a total of 152 for the whole year, i.e., a decrease of 57 (27·3 per cent.) on the previous year.

Breast feeding is considered successful if continued up to the sixth month ; failed if no breast milk is given after the second month, and fairly satisfactory if the baby is partially breast fed up to the sixth month. The heading " No Record " refers to those mothers who attended the clinic but have since removed from Salford leaving no address.

	1948. July 1st to Dec. 31st.	1949. Jan. 1st to June 30th.	Total.	Per cent.
Breast Fed.....	31	17	48	31·6
Failed.....	48	22	70	46·0
Fairly Satisfactory	15	9	24	15·8
No Report.....	8	2	10	6·6
Total	102	50	152	

Sixty mothers attended the clinic once only and of these :—

Breast Fed.....	17	(28·3%)
Failed.....	31	(51·7%)
Fairly Satisfactory	8	(13·3%)
No Record	4	(6·6%)

One mother only is listed as having failed to attend the clinic, and she continued to breast feed for nine weeks—the baby was weaned in order that the mother could get back to work.

Nine premature babies attended the clinic and of these mothers :—

Breast Fed.....	0	
Failed.....	6	(66%)
Fairly Satisfactory	2	(22%)
No Record	1	(11%)

One baby was admitted to hospital as a Pyloric Stenosis, but the mother was able to continue to partially breast feed the baby.

The total number of mothers referred to the clinic is made up as follows :—

General Practitioners.....	3
Maternity and Child Welfare Department	62
Midwives	54
Hospital.....	10
Self	23

Dental Care.

(Report by Senior Dental Officer).

I regret to have to report that the plans for routine dental examination for mothers and young children have been impossible to carry out owing to shortage of staff.

The tables below show the amount of work which has been carried out during the year :—

(a) Numbers provided with dental care :

	Examined.	Needing Treatment.	Treated.	Made Dentally Fit.
Expectant and Nursing Mothers	127	118	106	—
Children under five.....	325	319	285	—

(b) Forms of dental treatment provided.

	Extractions.	Anæsthetics.		Fillings.	Scalings or scaling and gum treatment.	Silver Nitrate treatment.	Dressings.	Radiographs.	Dentures Provided.	
		Local.	General.						Complete.	Partial.
Expectant and Nursing Mothers...	282	10	69	7	28	4	10	—	—	—
Children under five...	347	3	203	50	2	39	36	—	—	—

It is to be hoped that an improvement in the staffing situation will take place soon, as it is only the most urgent cases which can be dealt with and no conservative treatment can be carried out at all.

Physiotherapy.

This year has been a very happy and stimulating one in the Physiotherapy Department. Though never fully staffed, the number of Physiotherapists has increased over those of previous years, and I should like to express thanks to the willing way in which everybody has worked ; all clerical work has been done during the brief lunch hours, late clinics have been staffed and every holiday time volunteers have opened clinics to treat urgent cases.

Sunlight Clinics. These clinics have remained open throughout the year, fortunately no sunlight lamp has been out of action through breakage or shortage of staff, and it was very gratifying to answer that the waiting lists at clinics were now non-existent, and we are able to just keep up-to-date with the work, though it was realised that if there was a sudden large increase in the number of children requiring treatment, then once more there would be waiting lists.

All Day Nurseries now possess a portable sunlight lamp, and the frequent use of these should fully eliminate any fears that any child in a Day Nursery having a tendency to rickets might suffer because there was no one available to bring the child to a clinic for sunlight treatment.

Orthopaedic Clinics. A joint clinic of the School Medical Department and Child Welfare is held at Regent Road every Tuesday afternoon. This clinic is of great benefit to mothers, as it shortens the waiting period, and as a representative from a firm of surgical shoe and appliance makers also attends the clinic, any necessary support or alteration to shoes can be discussed and any measurements taken during the one visit.

Exercise Clinics. The policy of grouping children together for exercise classes continues. The children enjoy the exercises as a game and soon lose their shyness. The mothers are encouraged to co-operate with the exercises so that they may also learn them and continue the good work at home. The importance of suitable footwear is emphasised, and mother is taught the special manipulations specific to a deformity so that she really feels she is doing her part in helping the well-being of her child, and the more she helps the quicker will be the cure.

Anterior Poliomyelitis. The unfortunate epidemic of 1949 caused nine children under the age of five years to require treatment at the clinic. Two of these children are now wearing surgical appliances for walking purposes and one an abdominal belt. Heat, Faradic stimulation, massage and re-education exercises are given to these children four times a week. Only one of the mothers fails to bring her child regularly for treatment, and this may be partially excused, as she is expecting another baby. I think these mothers all deserve a special word of praise for their continuous attendance throughout the worst of the winter weather.

Ante- and Post-Natal Exercises. This is still uphill work. Many mothers consider that shopping and ordinary household duties provide adequate exercises, and it is very hard to convince them that knowledge of how various muscles work, the loosening of joints and strengthening of special muscles, would prevent a lot of the tiredness which occurs towards the end of their busy day, and that if only they would spare just five minutes once or twice a day after baby's arrival to practise the exercises, they would benefit so much from a feeling of well-being and freedom from backache and tired feet that they would not grudge the time.

Baby Gymnastics. While it is too early yet to assess its value in preventing defects such as genu valgum and genu varum, those children who have completed a full six months course have derived benefit from the treatment, as shown by firm musculature and general satisfactory progress.

An additional worker was appointed in September, who is confining her work to the treatment of healthy, normal babies. Treatment commences between the ages of three months and eight months. The course of exercises lasts six months, so at present it is too early to assess the value of the work in preventing flat feet, knock knees and bow legs amongst toddlers, which seem to be so prevalent in Salford.

<i>Total Attendances.</i>	<i>Exercise</i>		
	<i>Sunray.</i>	<i>Baby Gymnastics.</i>	<i>and Massage.</i>
Murray Street Clinic.....	3,275	1,511	1,489
Regent Road Clinic	4,734	1,029	2,490
Police Street Clinic	2,452	1,152	1,921
Day Nurseries	2,749	—	416
Landseer Street Clinic.....	—	195	—
Greenbank Nursery (Children's Dept.) ...	—	30	—
Encombe Place Clinic	—	289	—
Total	13,210	4,206	6,316

Psychological Clinic.

As last year the clinics have been held regularly on Mondays and Wednesdays. Most mothers attended when requested and were co-operative. Only a few failed to give reasonable co-operation.

In addition to the patients seen in the clinics, advice has been given to Health Visitors who visit neurotic mothers and difficult children on the district, who are unable or unwilling to attend the clinics. Many mothers in the waiting and weighing rooms have discussed minor difficulties.

A number of visits have been made to Nurseries to see children whose mothers were at work and unable to bring their children for treatment. The Matrons have been most appreciative of the advice given and in almost every case would like more visits, but the number of patients to be seen at the clinics make it impossible for visits to be made to the Nurseries during clinic hours.

The problems of children and parents have been of the usual type. Many are due to the housing difficulties and the consequent frustration of young and old. The suburban mother often over-anxious and over-protective, presents a different type of problem from the harassed mother of several children from the poorer home, but both have been appreciative and willing to learn.

On a few occasions fathers have come with their children. Two or three (quite independently) have suggested that a Parents Evening, where the men folk could ask questions, would be helpful.

Almost invariably the children require very little treatment when one can get the mothers to understand the psychological needs of the children.

Number of patients seen :—

	<i>New.</i>	<i>Subsequent visits.</i>
Regent Road	101	117
Murray Street	106	99

Family Planning.

Fifty-four mothers were referred for advice to the Manchester, Salford and District Mothers' Clinic, 33 attended.

Transfer of Information to School Health Service.

During the year, 3,879 records of children who had attained the age of five years were transferred from the Maternity and Child Welfare Department to the School Health Service. Every effort is made to enable these records to be made available for the medical officer concerned at the entrants' inspections.

DAY NURSERIES.

The demand for Day Nursery accommodation continues to increase and there are now some six hundred names on the waiting list. Only the most urgent cases can be admitted and places cannot be allocated to many children who really do need them. A growing need is for places for children whose mothers, because of sickness, confinement or some other reason, are temporarily unable to care for them. Every effort is made to make room in the Nurseries for such children and during the year, 74 were accommodated for periods varying from two to six weeks.

The building of the two Nurseries in Broughton and Pendleton has not yet begun.

<i>Number of Places.</i>					<i>Total.</i>
January 1st ...	Under two years ...	115	Over two years ...	150	265
December 31st...	„ „ „ ...	90	„ „ „ ...	180	270

This alteration is due to the change at Hulme Street where children are now being kept after reaching two years of age.

<i>Number on Registers.</i>					<i>Total.</i>
January 1st ...	Under two years ...	111	Over two years ...	158	269
December 31st...	„ „ „ ...	86	„ „ „ ...	196	272

Total Attendances (excluding Saturdays).

Under two years	19,729
Over two years.....	38,193
	<hr/>
Total	57,922
	<hr/>

Average Daily Attendance.

Under two years	77.6	i.e.	85%
Over two years	150.0	i.e.	83%
Under five years	228.0	i.e.	84%

<i>Number on Waiting Lists.</i>					<i>Total.</i>
January 1st ...	Under two years ...	308	Over two years...	210	518
December 31st ...	„ „ „ ...	297	„ „ „ ...	251	548

Parents' Clubs.

Each Nursery now has its Parents' Club and meetings are held regularly during the year except in July and August. The attendances are not as good as one would wish. Those mothers who do attend are keen and interested and have helped the Nurseries in many ways, e.g., making toys, dressing dolls, mending, collecting scrap materials, etc. Discussions are held on the care of children and nursery routine. The staff learn more about the home conditions than they can do from brief meetings with the mother in the morning and evening. The mothers are always ready to lend a hand when any special efforts are needed to raise funds for toys.

Teacher Superintendent.

Miss Joyce Lupson has been appointed to this post and will take up duties in January, 1950.

Training of Students.

During the year, eight students were successful in obtaining the certificate of the National Nursery Examination Board.

Other Training Courses.

One Matron attended a refresher course in Manchester. Eight nursery assistants attended a Child Care Reserve Course in Salford and five Child Care Reservists attended a Warden's Course held in Salford,

Medical Inspection

Each Nursery is visited monthly. Every child under eighteen months is seen at each visit and the older children once in every two months, unless absent from the Nursery. Absentees are seen at the next medical inspection after their return. Any child not making satisfactory progress is seen at each visit.

The condition of the children has been satisfactory and no child has been excluded as unsuitable and not making progress. There was an increase in the number of children suffering from naso pharyngeal infections, tonsillitis and cervical adenitis in the months of October, November and December. There were two cases of anterior poliomyelitis in the year, both cases in the same Nursery.

Only two cases of scabies have been reported. No record was kept of cases of impetigo, but they have been few in number and have occurred sporadically.

Now that each Nursery has its own lamp, courses of ultra-violet ray treatment can be given to all children. Members of the staff of the Physiotherapy Department give other treatments recommended by the Medical Officer. Baby Gymnastic Exercises are given to all children under the age of two years as routine and to special cases over this age on recommendation of the Medical Officer.

<i>Incidence of Infection.</i>	<i>Number of cases.</i>	<i>Incidence. Per cent.</i>
Measles.....	31	11·5
Pertussis	14	5·2
Chickenpox	16	5·9
Scarlet Fever.....	3	1·1
Dysentery	19	7·0
Pneumonia	6	2·0

Immunisation of Measles Contacts. Early in the year, the Department were asked to co-operate with the Medical Research Council in trials of Gamma Globulin in the passive immunisation of measles contacts in the Day Nurseries. Between the months of February and May, 80 children attending the Day Nurseries were given prophylactic doses of Gamma Globulin or Adult Serum. Records of the incidence of measles among these children were later sent to the Council.

THE UNMARRIED MOTHER AND HER CHILD.

For the first half of the year, there was no special worker for the care of the unmarried mother. These duties were carried out by a Health Visitor in a part-time capacity. New cases notified to the department were investigated but there was little opportunity for following up other cases.

A Health Visitor was appointed Medico-Social Worker in this field and commenced duties on June 27th. Since then, although the number of expectant unmarried mothers notified to the department has not increased, it has been possible to keep all known cases under observation so that help and advice could be given as the need arose.

A total of 95 expectant mothers were interviewed. These included 78 single girls, 16 married women and one widow. The ages ranged from 17 to over 30 years. There were 40 in the age group 19 to 25. Seventy-five were first pregnancies, 16 were second pregnancies and four were third pregnancies.

Of the 95 expectant mothers interviewed, 30 requested adoption, but were advised to keep their babies, if possible, and many were persuaded to do so.

The following summary shows the position in regard to these 95 cases at the end of the year. Eighty cases had been confined, 15 were still pending.

Child with mother	40
Child with mother and putative father (cohabiting).....	9
Mother removed from Salford before birth of baby	6
Mother and child removed from Salford after birth of baby.....	6
Mother married before birth of baby	9
Child with a foster mother.....	1
Mother and baby in a hostel.....	1
Children in homes apart from mother	2
Child placed with adopters—per Salford Children's Department	2
per Lancashire and Cheshire Adoption Society...	1
per Manchester Adoption Society	1
Babies died	2
Births pending	15
	—
Total	95
	—

It is gratifying that a growing number of unmarried mothers, who express a desire for adoption in the ante-natal period, change their minds after the birth of the baby.

All removals of illegitimate children from Salford are notified to the appropriate area and verified.

Fifty-five mothers were interviewed for the first time after the birth of the child. Thirty-six of these were single girls, 13 were married women, four were widows and two were divorcees.

In this group the summary at the end of the year was as follows :—

Child with mother	38
Mother and child removed from Salford	3
Child with foster-mother	2
Child with grandmother—mother deserted	1
Child with Local Authority—mother deserted	1
Child with mother and putative father.....	5
Parents subsequently married	3
Child died	1
Placed for adoption—per Manchester Children's Dept. ...	1
	—
Total	55
	—

The sources of notification of the 150 cases referred to above were as follows :—

Hope Hospital.....	68
Maternity and Child Welfare Department	9
Children's Department	4
Own accord	11
Health Visitor.....	33
N.S.P.C.C.	2
Other Health Departments	11
Other Social Workers.....	10
Private Doctors	2
	—
Total	150
	—

There is still need for hostel accommodation for those unmarried mothers not catered for by existing voluntary homes. This group includes :—

- (1) Married women, divorcees and widows.
- (2) Unmarried mothers having a second or third illegitimate child.
- (3) Unmarried girls who require hostel accommodation, but are unwilling to enter a hostel before the baby is born.

The majority of the above cases usually ask for post-natal hostel accommodation for short periods.

The fact that unmarried girls must conform to voluntary hostel rules, that they should be admitted two months before and remain for four months after the birth of the baby, does deter many cases from applying. In some hostels an even longer ante- and post-natal period of residence is insisted upon.

Affiliation Orders. In November, the worker for the Care of the Unmarried Mother commenced to investigate cases and advise unmarried mothers regarding affiliation orders and to accompany the mother to Court.

One unmarried mother was thus assisted and obtained an order for 15s.0d. weekly. One case is still pending, and several others are in the course of preparation. Number of visits to Court—4.

Children with Adopters. Although the Children's Department now deals with the application and placing of children for adoption, the actual Health Visiting during the trial period is undertaken from this Department.

Sixty-six visits have been paid in the period July-December.

NURSERIES AND CHILD-MINDERS' REGULATION ACT, 1948.

Private Day Nurseries.

One factory Day Nursery was registered under this Act. This Nursery has accommodation for 32 children.

Day Minders.

Two cases were notified to the Department as coming within the meaning of the Child Minder's Regulations of 1948. In one case, arrangements were only temporary, in the other the premises and person were unsuitable for registration and this woman ceased day minding.

Total visits—day minded children—17.

HEALTH VISITING SERVICE.

Resignations.

Health Visitors. Nine Health Visitors left the Service during the year—two owing to ill-health, four to take up similar appointments under the Lancashire County Council, one for domestic reasons, one retired on superannuation, and one returned to Hospital Nursing after completing her service under contract in accordance with the Salford Health Visitors training scheme.

Clinic Nurses. Six Clinic Nurses left the Service, two for domestic reasons, one to enter for the Health Visitors' training course, and three to take up other posts.

Student Health Visitors. One Student Health Visitor gave up the training course after a few weeks on the recommendation of a psychiatrist.

Appointments.

Health Visitors. One Health Visitor was appointed for combined work, and one special Health Visitor appointed for Care of the Unmarried Mother and her Child, and for the care of the aged and infirm.

Clinic Nurses. Eleven appointments were made. A dispensation was granted by the Ministry of Health to allow six Clinic Nurses to act as Health Visitors until the end of 1950, when it is hoped that sufficient Health Visitors will be available to fill all vacancies.

Hygiene Attendants. Two hygiene attendants were appointed for the first time in the Maternity and Child Welfare Service.

Student Health Visitors. Seven students were appointed under the Salford Health Visitors training scheme for the year 1949-50, three to train in Manchester and Salford, one in Cardiff, one in Bolton, and two in Leicester.

The seven students trained during the 1948-49 course all passed the Health Visitors examination in May and commenced their first period of service as Health Visitors according to the terms of agreement laid down in their contracts.

Centre Superintendents.

Centre Superintendents were appointed to each of the three main clinics, Regent Road, Police Street and Murray Street. Their work has been very successful in facilitating the smooth running of the Clinics, and has resulted in greater co-ordination of activities of the various sections of clinic work taking place therein.

Social Clubs.

The Centre Superintendent and Health Visitors of Murray Street Clinic were responsible for the opening of the first Social Club for mothers in Salford. Club meetings are held fortnightly and activities have included discussions relating to child care, home-craft and health ; lectures of academic and general as well as of social and domestic interest ; a summer outing, a theatre party, and a Christmas party for the children of members. Activities are organised by a Committee consisting of members of the Club. The Health Visitors, however, attend all meetings, and in an unobtrusive way supervise and help with the organisation of activities—all in their spare time.

Work of the Health Visiting Staff.

Maternity and Child Welfare.

Home Visiting.

Although hampered by shortage of staff, home visiting has been carried out fairly well. This was mainly due to the reorganisation of work made possible by the employment of Clinic Nurses. Without this the home visiting position would have been disastrous. In the first six months of the year only 17,486 visits were paid to children under five years. In the second six months when newly qualified students were available for full time duties, and additional Clinic Nurses were appointed, 26,128 visits were paid. The total home visits during the year for Maternity and Child Welfare purposes only was 44,485, which although some 2,082 visits more than those paid in 1948, was approximately 41,372 less than the minimum which is generally considered necessary for adequate supervision of children in the 0—5 age group. It is unlikely, therefore, that an adequate system of supervision can ever be carried out unless the establishment of Health Visitors is revised and increased. A recent increase of staff—six Health Visitors—was made in order to implement the National Health Service Act, but this does not affect the position regarding Maternity and Child Welfare work.

Clerical Work.

Some 23·2 per cent. of Health Visitors' time was spent in clerical work. Much of this work, such as sorting and filing of cards, and copying of names and addresses is a waste of Health Visitors' time, and it is hoped to arrange for clerical help with work of this nature in 1950.

Clinic Sessions.

Health Visitors spent some 3,159 sessions in Maternity and Child Welfare Clinics, the equivalent of approximately six Health Visitors doing full time clinic work.

The employment of Hygiene Attendants for weighing children and helping generally in the clinics has done much to release the Health Visitor for advisory and educational work. The practice of interviewing and advising each individual mother attending has now been extended to cover practically all clinic sessions, and more time has been devoted to collective teaching.

There is a great need for additional clinic accommodation in the Kersal and Higher Broughton areas, where Murray Street Clinic is the only centre for seven Health Visitors' districts, involving 4,109 children under five years.

Mothercraft Competition.

The development of collective teaching in Maternity and Child Welfare Centres has always been rather slow, but was stimulated this year by the first of what is hoped will become an annual competition for mothers.

A series of talks on mothercraft, given by the Health Visitors in the clinics, preceded a written examination consisting of six questions on child feeding, care and management. Over 90 mothers entered for the competition. The first prize of £2 2s. 0d. was awarded jointly to two mothers; a second and third prize, plus four consolation prizes were also awarded.

The standard of work entered was good and the competition evoked much interest in all the clinics, and particularly at the Regent Road Centre from which almost half the total entries came.

Visits to Other Classes of Cases.

Adults Suffering from Illness.

A report on the work carried out in relation to the aged and infirm is given elsewhere. Visits to adults outside the “ old age ” category have been made by the general Health Visiting staff. Cases are usually referred by Hospital Almoners and occasionally by relatives. The Health Visitor interprets the Doctors’ instructions to the patient, supervises diet, advises relatives on home nursing, arranges for District Nurse, and for Home Help, and contacts appropriate social agencies should the need arise. One hundred and seventy-four visits were paid during the year.

Miscellaneous Visits.

Special enquiries for the purpose of tracing children removed from the area, visiting relatives regarding children, tuberculous and other patients were made, involving 1,557 visits. A further 7,747 visits were paid to homes, excluding tuberculous cases, to which access could not be gained.

Tuberculosis Work.

Home visiting at three monthly intervals of all tuberculous patients has been carried out by Health Visitors during the year. Work in the tuberculosis dispensary was carried out by a full time tuberculosis nurse employed by the Regional Hospitals Board, relief for holidays and sickness being supplied by the Health Nursing Service, who also undertook Ambulance Attendant duties. Details of the work are as follows :—

Number of patients on Health Visitor’s lists, 31st December, 1949 (including 308 new cases notified during the year)	1,140
Number of visits paid	2,801
Visits to tuberculous patients where no access obtained (in former years “ no access ” visits were calculated as full visits).....	761
Total number of visits.....	3,562
Increase in total visits over total visits paid in 1948.....	103
Number of sessions during which a Health Visitor or Clinic Nurse acted as Ambulance Attendant.....	100

Aged and Infirm Persons.

During the year, the visiting of aged and infirm persons in their own homes has been established as part of the work of the Health Department. For the first six months of the year, this visiting was undertaken by the Health Visitors in their individual districts. Co-ordination was required in this work.

A Medico-Social Worker for the Care of the Unmarried Mother was appointed at the end of June, and, as the adoptions were no longer dealt with by this Department, it was possible for her to combine the care of the aged and infirm with her other duties.

The following table shows the number and source of notification during the first six months of the year.

Month	Notified	Hospital Almoners	M.O.H.	Councillors	Relatives	Neighbours	Health Visitors	Home Help Service	Other Health Depts.
January ..	2	2	...	...	...	...	...	...	...
February	3	2	1	...	...	...	...	...	...
March	3	1	...	2	...	...	...	...	...
April.....	10	2	5	...	1	2	...	...	...
May	10	4	...	...	1	2	1	1	1
June	4	...	...	...	1	1	1	1	...
Total ...	32	11	6	2	3	5	2	2	1

These cases were referred for investigation of home conditions and lack of adequate care, for medical follow-up after discharge from hospital, or for visiting while awaiting admission to hospital.

During the period July 1st to December 31st, the work has been continued by the specially appointed Health Visitor, and, in the last two months, has considerably increased. This increase has been due to the daily notification from Records Office at Hope Hospital, of the aged, chronic sick on the deferred list awaiting admission to hospital.

The following table shows the number and source of notifications during the second six months of the year.

Month	Notified.	Hospital Almoners.	M.O.H.	Councillors.	Relatives.	Neighbours.	Health Visitors.	Home Help Service.	Civic Welfare Department.	Cripples Aid Society.	Found.	Deferred List—Hope Hospital.
July.....	15	3	...	1	2	...	2	5	2	...	...	...
August ...	9	1	...	...	1	...	2	3	2	...	...	...
Sept.	12	4	...	...	1	...	1	3	2	1	...	...
October ..	7	4	...	...	...	...	...	3	...	...	...	...
November	58	6	1	...	...	...	1	2	...	...	2	46
December	55	4	...	...	...	...	1	...	...	*1	2	47
Total ...	156	22	1	1	4	...	7	16	6	2	4	93

* Housing Department.

Analysis of the cases notified as awaiting admission to hospital :—

Month	Number Notified	Visited in their own homes	Urgent cases admitted to hospital before visiting	Cancelled cases—died within 24 hours of notification	In Nursing Homes or Institutions not visited	Awaiting visits. Carried forward to following month
November.....	46	29	12	2	1	2
December	47	30 and 2 c/f.	10	1	1	5
Total	93	61	22	3	2	7

Of the 61 cases visited in November and December in this category :—

Month	Subsequently admitted to hospital	Died while awaiting admission	Remaining on the awaiting list	Total
November	20	4	5	29
December	25	4	3	32

Summary of home visits :—

Period	Primary home visits	Subsequent home visits	Total
January 1st to June 30th	32	13	45
July 1st to December 31st	121	162	283

From the above table, it will be seen that, apart from the increased number of cases, it has been possible to do a great deal more follow-up work during the second half of the year. There is, however, scope for further development here.

With the increased number of cases, there is a corresponding increase in the amount of clerical and social work. The aged and infirm do not always know or understand the services that are at their disposal and relatives are often non-existent or indifferent.

The social work comprises—

- (a) Contacting hospital Almoners.
- (b) Contacting relatives.
- (c) Referring cases to the National Assistance Board, the Home Help Service, the Sanitary Department or the Civic Welfare Department, and Home Nursing Service.
- (d) Referring cases to voluntary social workers, e.g., Meals on Wheels, Family Service Unit, Cripples Aid Society, Women's Voluntary Service, Good Neighbours' Association, etc.

There are still some cases that are not adequately covered by the existing services. These consist of those aged and infirm persons living alone, without friends or relatives, in a state of dirt and neglect. They are difficult to deal with, being fearful and suspicious of investigation, and wary of accepting help. They are unwilling to leave their homes, are beyond the scope of the Home Help Service, and the Family Service Unit are limited in the number of such cases that they can undertake. It is hoped that there will be an answer to this problem in the near future.

Refresher Courses.

Two Health Visitors attended full time refresher courses for two weeks during the year, one at Cardiff, the other at Cambridge, both organised by the Women Public Health Officers Association. Short week-end or day refresher courses were also held locally from time to time, arranged respectively by the Manchester Health Department, the University of Manchester, and the Central Council for Health Education. All Health Visiting staff have attended at least one of these courses.

Children Committee.

On request from the Children's Officer the services of a Health Visitor have been made available for the purpose of supervising all children placed for a trial period pending adoption, and other children as required. Medical examination of children prior to adoption is also arranged at Infant Welfare Centres.

Hygiene Attendants.

Three Hygiene Attendants are employed as follows :—

Scabies Clinic. A clinic staffed by a Hygiene Attendant is open every afternoon, including Saturday, for the purpose of treating scabies. The number of cases treated during the year was :—

Adults	459
School children	132
Children 0—5 years	69
	—
Total	660
	—

Home follow-up of defaulters and domiciliary treatment is sometimes carried out.

Maternity and Child Welfare. Hygiene Attendants assist with the preparation and clearing up of Infant Welfare Clinics and Ante-Natal Clinics, they weigh children, and act as receptionists and attendants to Doctors at Ante-Natal Clinics. They are also responsible for sorting, checking, and packing soiled and clean linen, and for sending torn linen for repair.

Diphtheria Immunisation. All needles, syringes, forceps, and other equipment used for domiciliary immunisation are prepared for sterilisation by Hygiene Attendants. The actual sterilisation is carried out by laboratory technicians.

The work of the Hygiene Attendants is undoubtedly of great value in helping to release trained nursing staff for the skilled work which only they can do.

HOME NURSING SERVICE.

Staff.

There have been many changes in staff throughout the year. Several of the qualified staff resigned to take up posts elsewhere, and in March the situation was such that an appeal for part-time staff had to be published in the Press. The appeal resulted in the engaging of four District Nurses on a part-time basis. Towards the end of the year the staffing situation became easier, although at times things were difficult, no call made upon the service was refused.

At the end of the year the staff consisted of :—

- One Queen's Superintendent.
- One Queen's Assistant Superintendent.
- One Queen's Second Assistant Superintendent.
- Four Queen's Nurses (including two male nurses).
- Five Queen's Nurse Students.
- One Ex-Queen's Nurse (part-time).
- One State Enrolled Assistant Nurse (part-time).
- One Auxiliary Nurse (part-time).

Training for Queen's Certificate and District Nursing.

Seven students entered for training during the year ; one from the Queen's Institute in London, three were students from the Lancashire County Home Nursing Service, and three made application direct to the Salford Home.

Three students were successful in passing the examination for the Queen's Roll. There were still four students in training at the end of the year.

Two of the students, one from the Queen's Institute and one from the Lancashire County, on completion of their training, made application to remain on the permanent staff and were appointed.

Nursing in the Home.

A total of 2,089 patients were nursed during the year. This included 195 who were on the books at the end of 1948. The majority of the new cases, 1,679 (80 per cent.), were referred to the service by general medical practitioners in the City. The remainder were cases referred from the various hospitals in Salford and Manchester, from the Maternity and Child Welfare Department, from the Tuberculosis Officer, and the Blind Welfare Officer. Twelve patients made application on their own account.

The services of the Home Nurse are called upon for a great variety of cases. The largest number can be classified as medical cases, both acute and chronic. These include cases of pneumonia, rheumatism and cardiac disease. Among the chronic cases are patients suffering from senility, rheumatoid arthritis, and hemiplegia.

The surgical cases nursed are mostly post-operative cases from the hospitals, but occasionally the nurse is asked to assist at minor operations in the patient's own home.

During the year, 89 patients suffering from diabetes mellitus were visited. When possible the nurse teaches the patient how to give her own insulin and only pays supervisory visits.

Included among the patients visited during the year were 163 children under the age of five years.

Among the most distressing cases visited by the district nurse are the cases of inoperable carcinoma.

The total number of visits paid by the staff of the service was 34,779.

The following is a list of the new cases referred during the year and shows the type of cases dealt with :—

Children under five years of age	163
Pneumonia	34
Post operative	125
Surgical	315
Tuberculosis.....	22
Gynæcological	65
Diabetes Mellitus.....	89
Medical	1,034
Attendance at operation.....	15
Whooping Cough	1
Pernicious Anæmia.....	8
Tonsillitis.....	5
German Measles	1
Influenza	17
Total	1,894

Gifts for Patients.

The nursing staff gratefully acknowledges fifty gift parcels from the Red Cross, and gifts of fruit and flowers from the children of Lancaster Road School for distribution among their poorer patients.

INFANT MORTALITY.

The total number of infant deaths in the City in 1949 was 193, giving an infant mortality rate of 53 per 1,000 live births. One hundred and nine died in the first month, giving a neo-natal mortality rate of 30 per 1,000 live births. These figures are disappointingly high after the record low figure of 1948.

Among the neo-natal cases the principal causes of deaths were prematurity, congenital debility, birth injury and respiratory diseases, in that order.

There were fifteen deaths certified as due to birth injury, thirteen of these occurred in hospital and two on the district.

Nine children died of whooping cough. One death occurred at the age of two months and the others after the age of three months.

Five deaths were certified as due to asphyxia caused by mechanical obstruction. In none of these cases was death found to be due to aspiration of stomach contents.

The most favourable months, from the point of view of infant life, were January, June and December, while the worst month appears to have been July, when a total of 31 infant deaths occurred, 20 of them being neo-natal deaths.

Neo-Natal Deaths in July.

<i>Causes.</i>	<i>Number of Deaths.</i>
Prematurity	6
Congenital debility.....	3
Congenital defect.....	1
Birth injury	4
Respiratory diseases	3
Gastro-enteritis	1
Other causes.....	2
	—
Total	20
	—

Infant Deaths in July.

<i>Causes.</i>	<i>Number of Deaths.</i>
Prematurity	6
Congenital debility.....	3
Congenital defect.....	1
Birth injury	4
Respiratory diseases	5
Gastro-enteritis	6
Whooping cough	2
Other causes.....	4
	—
Total	31
	—

An investigation into 81 of these deaths carried out by Health Visitors elicited the following information.

<i>Place of Death.</i>	
Home	22
Hospital.....	59
<i>Health Visitors' Impression of Efficiency of Mother.</i>	
Good.....	27
Fair	32
Poor	20
No opinion.....	2
<i>Method of Feeding at time of Death.</i>	
Breast	14
Partly-breast	7
Artificial	58
Weaned	2
<i>Parity of Mother.</i>	
Of the 81 cases investigated 19 were first children.	
<i>Age of Mother.</i>	
Under 25 years.....	21
25 years and under 30 years	19
30 „ „ „ 35 „	21
35 „ „ „ 40 „	10
40 „ „ „ 45 „	6

Social Conditions.

Only two fathers appear to have been unemployed. Their occupations varied considerably, but seemed to be mainly of the artisan type.

<i>Type of House.</i>	
Terraced	64
Back-to-back	1
Flat	1
Detached	1
Semi-detached	1
Shop	1
Corporation house	7
Tenement, rooms and lodgings	8
<i>Health Visitors' Impression of Cleanliness in Home.</i>	
Clean	36
Fairly clean	32
Dirty	13
<i>Health Visitors' Impression of Family Circumstances.</i>	
Comfortable	25
Moderate	30
Poor	26

MATERNAL MORTALITY.

It is gratifying to be able to record that the Maternal Mortality Rate for 1949 was nil.

ALMONER'S REPORT FOR 1949.

The work delegated to the Almoner is as follows :—

- (a) Care and after-care of persons suffering from Tuberculosis (Section 28 of the National Health Service Act, 1946).
- (b) The follow-up of women suffering from Venereal Diseases (Section 28 of the National Health Service Act, 1946).
- (c) The administration of the Home Help Scheme (Section 29 of the National Health Service Act, 1946).
- (d) The arrangement of convalescence (Section 28 of the National Health Service Act, 1946).
- (e) Co-operation with the Maternity and Child Welfare and School Health Services in helping and advising families on social matters.
- (f) Co-operation with various statutory authorities and voluntary organisations.

The staff consists of the Almoner and three assistants, all of whom are able to deal with any section of the work excepting item (b). Knowledge of this work is confined to the Almoner and one assistant, for reasons of secrecy.

(a) Tuberculosis.

The effect of the operation of the National Health Service Act on the work in connection with Tuberculosis was set out at some length in the Almoner's Report for 1948. It is the Almoner's duty to co-operate with the medical and health visiting staff in securing the patients' treatment and, if necessary, isolation, and to further their teaching with regard to the patient's way of life. More especially, it is the Almoner's concern to see the patient—

- (i) As a member of the family ; and
- (ii) As a member of the community ;

to advise and encourage him to face his disability and help him, if necessary, to rearrange his life so that the value of the treatment he receives will not be lost. The difficulties besetting the tuberculous are legion ; true the advances in chemico-therapy are making prospects of recovery more rosy, and the provision of special financial allowances by the National Assistance Board help considerably, but many of their domestic and personal problems remain unsolved. Resettlement in industry proves difficult, even with the most helpful co-operation of the Ministry of Labour officials. Light work, so often recommended for them, is very difficult to find.

Many tuberculous families have been rehoused, but it is often found that the cost of removal and furnishing has made the family so poor that there has been little money left for ordinary food, much less the extras required for the tuberculous patient. Nevertheless, much valuable work has been done, and the Department tries, as in the past, to be a guide, philosopher and friend to every tuberculous household known to them.

A particularly happy feature of the work during 1949 was the number of occasions on which young children were accepted for care and maintenance by the Children's Officer, to enable their mothers to enter sanatoria for treatment. Prior to the establishment of the Children's Department it was almost impossible to make such arrangements. The mother of a family finds great difficulty in believing that her own health is, for the time being, more important than her duties as a housewife or mother, and it is often very difficult to persuade her to accept treatment.

The Almoner endeavours at all times to help the patient to dispose of any circumstances which may hinder him from taking treatment and to understand all the fears and doubts occasioned by the diagnosis.

(b) Venereal Diseases.

As in the case of tuberculosis the medical side of this work is now the concern of the Hospital Board, but the social work remains with the Local Authority as part of its Prevention of Illness, Care and After-Care Scheme. The Almoner is responsible for contact tracing, following-up defaulters and visiting patients who live in Salford. In this work the Almoner has one assistant. Their aim is to co-operate with the staff of the clinic to ensure that no domestic or social problem prevents a patient from taking treatment and remaining under the care of the Department until a cure is effected, with the minimum of default in attendance.

Though modern methods of treatment have reduced the amount of work considerably, it is still as varied in its scope as in previous years, and involves interviewing every new case. Patients come from every walk of life and are of all types, e.g., the person who has been reading books or propaganda on the subject and imagines that "there may be something wrong"; the wife whose husband has been unfaithful; the pregnant woman whose disease has been discovered by a routine blood test at the Ante-Natal Clinic; the elderly widow who was unaware that her husband had infected her with syphilis before his death; the young girl, maybe of 15 or 16 years, possibly brought by the Children's or Probation Officer; the amateur; and even the lady who, when asked her occupation, replied with some hauteur, "Professional Prostitute."

To every interview the Almoner must bring an individual approach, deal with each case with understanding and make herself easily understood by the patient. It is a help if experience has taught the Almoner how to discern the difference between truth and fiction, for many stories are told.

Visiting too, brings its special problems. Much tact and quick thinking are needed to maintain the necessary secrecy. The visitor is frequently involved in a triangular interview. In one such instance she was presented to a patient's friend as a money lender came to collect a debt. In another she was introduced to a Chinaman as "my Aunt from Warrington." Nevertheless, in these, as in many other such instances, the patient fully understood the purpose of the visit and duly returned for treatment. The visitor may find, on calling at a home, that a woman is genuinely anxious to come for treatment, but has, perhaps, several children or a very unco-operative husband to whom she owes her infection, or maybe parents who would be horrified if they knew of it. Whatever the reason for the default, ways and means have to be found to enable the patient to visit the clinic and to continue her treatment.

Unremitting efforts are made to save any child from being born with congenital syphilis. This can be achieved if the woman can be persuaded to attend the clinic or go into hospital for a course of treatment before her confinement is due. Most women, whatever their own shortcomings may be, are prepared to take sufficient trouble to protect the coming baby. There are, however, a certain number who are careless, indifferent, or of such poor mentality that they cannot understand the gravity of the situation. In these cases efforts are redoubled, and patients visited repeatedly until the woman has completed her treatment and the coming baby is safe. During 1949, in every case where a woman suffering from syphilis was known to be pregnant, either the staff of the clinic or of the Almoner's Department was successful in persuading the mother to attend for adequate treatment. The four children who were born in Salford during 1949 suffering from congenital syphilis were children of women who had been admitted to hospital as emergencies. They had escaped the routine Ante-Natal blood tests and were not diagnosed as syphilitic until after the birth of the children.

(c) Home Help Service.

This service has become so widely known and valued during the past year that the demands upon it have frequently exceeded the help available. The routine work consists of :—

- (i) Interviewing applicants for the post of Home Help.
- (ii) Interviewing applicants for the services of a Home Help.
- (iii) Assessing the charge to be made for the services. This involves verification of wages from employers.
- (iv) Visiting householders.
- (v) Allocating the Helps and assessing needs of individual applicants.
- (vi) Interviewing each Home Help at least once each week for briefing.
- (vii) Discussing the progress of each case with the Home Help in charge.

The selection of women suitable for this work calls for some skill in the judgment of character. It is essential that the Help be completely honest and trustworthy. She is obliged to work without supervision or guidance for the greater part of her time. She must be adaptable to any type of household, including problem families, have knowledge of the ways of the aged and of young children who may be left completely in her charge, must not gossip about the patient's affairs and must, in addition, be a thoroughly good housewife.

In allocating the services of the Helps certain priorities are kept in mind—confinements and mothers with young children taking precedence over all other applicants. The service is, however, fast resolving itself into one for the aged and chronic sick. The problem of the aged becomes more acute as each day passes, and it is fatally easy to let sentiment override reason in selecting the cases to be helped. In the process of elimination the visitor tries to discover whether the old people have any sons, daughters or kindly friends who can help, and, if so, the service is withheld or reduced to a minimum. A vast number of elderly people are well cared for by their own children or relatives, but there can be no doubt that a growing minority are seeking to use any and every service to relieve them of what they regard as a burden. Filial responsibility seems to be much less fashionable now than in former years. There is, however, a very large number of elderly people living alone who have no children or near relatives, and for many of these cases the service would appear to be a sheer necessity.

The Home Help Service is often spoken of as an emergency service and so it was intended to be. Experience, however, has shown that once a Home Help is sent to an elderly person it is almost impossible to withdraw her. Indeed, as time passes, the need increases. One such instance occurred recently and is typical of many others. An elderly couple, having no children and no near relatives, both approaching 80 years of age, had managed quite comfortably for the last 18 months with the Home Help doing 12 hours duty per week. This particular help was urgently needed for an emergency case and left the old people for about ten days. When she returned she found that the wife had had a seizure in the meantime and had been left on a couch in the living room, incontinent, for several days. It was then necessary for the Home Help to attend daily and to take full charge of the household for several weeks until the old lady could be admitted to hospital.

Whilst a considerable number of aged people have been assisted by the service during 1949, it would appear that the service is still far from adequate. One would not suggest that the aged should be denied any service which would make their declining years more comfortable and peaceful, but it is felt that consideration will soon have to be given to defining the scope of this particular service. It is a debatable point whether—

- (a) The provisions of Section 29 of the National Health Service Act, 1946, should be interpreted to mean providing domestic helps whose duties are merely cleaning floors, washing clothes, etc., or whether
- (b) it is intended to include supplying housekeepers for the aged to care for them during the whole 24 hours, “sitters-up,” nurses, foster mothers, etc.

In this City the wider interpretation has been placed on Section 29, and it has been our practice to include many of these services. The ideal put before Home Helps hitherto has been “go and do for the elderly what a good daughter would do,” and “be as a kindly aunt to children deprived, for the time being, of their mother’s care.”

In June, 1949, a short course of training for Home Helps was arranged. The purposes of the course were as follows :—

- (1) To fill in the gaps in the Home Helps’ knowledge.
- (2) To make her fully aware of the facilities offered by the Health Department ;
(a) in the promotion of “positive health” ; and (b) in the prevention and cure of various physical defects.
- (3) To teach by lecture and discussion the national importance of home life and to assist the Help to grow in knowledge and strength of mind and character so that she can transmit that knowledge and strength to the folk she serves.
- (4) To make the Helps feel that they are members of the health team.
- (5) To learn from the Home Helps how to make the service more efficient.

Ten Home Helps took part in the course—they were women with varying periods of service from six months to two years. The purpose of the course was clearly set before them at the outset as being health education. As the course proceeded it became increasingly evident that they, as well as the organiser and lecturers, had knowledge to impart. They had first-hand knowledge of the difficulties to be found and were keen to learn how to surmount them.

The number was limited to ten so that discussions would be free and friendly. The organiser’s choice fell on those particular women because (a) they appeared to be women who would remain long in the service, and it was thought that the best possible use would be made of the instruction and help they would receive and that the City would reap a rich reward for a very small expenditure ; and (b) they were women who would learn from each other.

The service was carried on during the absence of these women ; (a) by part-time workers doing full-time work ; and (b) by limiting new cases to maternity or other urgent work. The course was arranged to take place in mid-summer as it was thought that the one or two elderly people who would have to be left could manage better then than any other time.

The Home Help, more than any other health officer, has the opportunity of teaching by example. She is in the house and of the household for a longer period than the Health Visitor, Midwife, School Nurse, Sanitary Inspector or Social Worker. It was, therefore, felt that if she understood something of the work of these officers and its object, the Home Help might be able to further their teaching.

The visits to the "Homestead" (Old People's Home) and the geriatric wards at the local hospital were included, not so much to show how the City cares for its aged and infirm poor, as to induce the Home Helps to put every effort into "keeping the old folk out of hospital" and institutions. A lecture on this subject was given by the Medical Officer of Health *prior* to these visits and the idea was kept alive by the discussions which followed.

The whole course proved very satisfactory and without exception the ten Home Helps were most grateful for being included.

Due attention has also been paid to the welfare and health of the Home Helps themselves. Theirs can be a lonely job. They lack the pleasure of meeting, day by day, those doing the same kind of work. Social evenings are therefore arranged from time to time in order to stimulate a team spirit among them, e.g., an evening motor run into the country with supper and a "sing song" at a little country inn; an evening run to Blackpool to see the "lights"; a theatre party preceded by tea at a local café. All of these occasions have proved very happy sociable events, and have at least enabled the Helps to make each other's acquaintance.

Experience has shown that the part-time Home Help can often prove very satisfactory. Many women are able to work four or five half-days per week without detriment to their own home and health, but one always keeps in mind that the work they do in other people's houses has to be repeated in their own home. They do not have the change of occupation which is common to most women who go out to work in factories and offices. The system of engaging part-time Helps has proved economical, both as regards finance and the Home Helps well-being. With the plentiful supply of part-timers the organiser can avoid having the "wasted hours" which are inevitable if only full-time workers are employed.

(d) **Arrangement of Convalescence.**

The Almoner makes arrangements for the provision of convalescence for school children, children under school age, and mothers with young children. With regard to school children, 159 cases were interviewed and subsequently 115 of these children were sent for convalescence. In the remaining 44 cases the treatment was, for various reasons, not accepted. During the interviews with the parents of these children many opportunities arise for the Almoner to give help and advice. Clothing has occasionally been found, fares have been paid in special needy cases, and in several instances the Almoner has been able to assist other members of the child's family by reference to an appropriate agency or service. As in the immediate past, the Invalid Children's Aid Association arranged convalescence in each case, both for school children and children under school age. Owing to the increase in fees at practically all the Homes during 1949, the financial provision made by the Education Committee for school children for this service was insufficient for the full twelve months. The Invalid Children's Aid Association kindly arranged convalescence in several urgent cases regardless of the fact that no reimbursement was possible. It may be said that the whole of the money allocated for this purpose is spent on the actual fees charged by the Homes to which the children are sent and there are no administrative costs.

The following figures indicate the extent of the work done during 1949 :—

Home Helps.

Cases assisted—

Maternity	156
Pregnancy	10
Mothers with young children	60
Elderly and infirm patients	178
Tubercular patients	3
Miscellaneous	2
Number of investigations into financial circumstances	537
Visits to homes of applicants	1,122

Tuberculosis.

Interviews *re*—

Food Priorities.....	1,208
Free milk	321
Rehousing.....	10
Clothing	32
Miscellaneous	27
National Assistance	132
Visits to homes of Tubercular patients	20
Patients assisted with beds and bedding	3
„ „ „ clothing	35
Nursing equipment loaned	4

Convalescence.

School children	115
Pre-school-age children.....	21
Mothers with one child.....	1
„ „ two children	1
„ „ three children	5
„ „ four children	2

Assistance with Clothing (excluding Tubercular Patients).

Children	44
Adults	10

Maternity and Child Welfare.

Miscellaneous help and advice	50
Arrangements for care of children whilst mother in hospital....	12

Venereal Diseases.

Number of new cases in 1949	520
„ „ defaulters visited	117
„ „ visits paid	364
„ „ “ returns ” in response to visits	80
„ „ defaulter letters sent out.....	1,066
„ „ “ returns ” in response to letters.....	340

HEALTH EDUCATION.

With the appointment of a full-time officer in January, 1949, health education work developed during the year on four main lines :—

1. Talks and lectures to members of local associations, professional groups, parent/teacher associations, etc. During the year, some forty-three such talks were given, principally during the evenings ; the assistance of other officers of the Health Department in fulfilling some of these engagements is gratefully recorded. At present, there is no panel of outside lecturers, but should the need for one develop, there would be no difficulty in forming one locally. There is no doubt that the semi-formal talk or lecture to a mixed audience is a very useful method of "getting home" various health educational topics, particularly when a live question and discussion period can terminate each talk and when some visual aid can either be shown to the audience or can be distributed for the members of the audience to read individually at home.

2. Film and filmstrip shows to medical, nursing and administrative staffs of the Health Department, to outside departments, parent/teacher groups, Mothers' Clubs, Women's Associations, etc. With the exception of the summer months, May to August inclusive, regular film shows at fortnightly intervals were arranged for members of the staff of the Health Department. Films on health subjects were obtained from the Central Film Library, from various professional producers and distributors, and in several instances professional celebrities were kind enough to bring rare films along and often explain and extend the scope of the film by a talk and discussion after the screening. Additionally, through the kindness and co-operation of various foreign Embassies, films on certain of the health and social services of other countries, i.e., Denmark, Canada, U.S.A., Sweden, New Zealand, etc., were shown. Film shows were arranged, often at very short notice, for outside departments, Mothers' Clubs and various local associations, and the opportunity was taken to screen a series of films on Food Hygiene for members of the City Council.

Tribute must be paid to the co-operation and efficiency of the Film Section of the regional office of the Central Office of Information without whose assistance the extensive film programme could not have been carried out without considerable expense.

There is no doubt that the 16 mm. sound film can be a most useful aid in health education work providing always that the films used are not only technically accurate, but also are suitable for the particular audience for which they are intended. The "children's" series and the new Food Hygiene films are excellent examples of instructional material presented in an entertaining manner, but there still does appear to be a pronounced shortage of films devoted to health teaching. It is understood that a new world-wide catalogue of "health" films is at present being compiled by the World Health Organisation of the United Nations.

A 35 mm. film strip projector was purchased and a library of film strips on health subjects is gradually being built up. It is hoped during the coming year to experiment with the use of a rear projection screen and strip projector to augment the teaching of the health visitors in the clinics. There is a shortage of film strips dealing with maternity and child welfare work and although this gap will undoubtedly be bridged in time, it is proposed to commence the production of a certain number of film strips for this work. During the year, a film strip was produced dealing with "Problem Families," together with an adequate teaching script, and work on a further strip dealing with the "Care of the Aged" was commenced.

3. Clinic poster displays, display windows and mobile Health Exhibition stand of the Central Council for Health Education. An endeavour was made to keep all clinics and nurseries, etc., supplied with suitable colourful posters, renewed at regular intervals, though to date only one clinic (Police Street) has been adequately equipped with poster display boards. Four large display windows have been in regular use during the year and the subject matter displayed has included Diphtheria Immunisation, Vaccination, Food Hygiene, Rest and Recreation, Welfare Foods, Sleep, Home Safety, Foot Health, etc. From the 1st May onwards, the mobile Health Education Exhibition stand has been regularly displayed at various public sites throughout the City, the topic material displayed being changed at two-monthly intervals. By means of the exhibition stand, health education material has been brought to the notice of members of the public who would perhaps not bother to see a formal exhibition.

4. Newspaper publicity via the local press. The active co-operation of a local newspaper, the "Salford City Reporter," was obtained and during the latter half of the year, a series of articles "Notes from the Health Department" was written and published. The subject matter ranged from "Home Accidents" (a series of six articles) to Vaccination and "The Life of Edward Jenner," from Diphtheria Immunisation to Poliomyelitis. Food and Diet, Sunshine and Smoke Abatement, Population Trends, etc., all received the attention of a weekly article. That the articles were read and appreciated by at least a proportion of the regular readers of the weekly newspaper is evident from the letters received by the editor.

In addition to the normal activities mentioned before, assistance was given by the Health Education Officer in the organising of meetings, conferences and courses and in the preparation of reports.

MENTAL HEALTH SERVICE.

Annual Report for the Year 1949.

This is the first completed year of the Mental Health Service, and I hope the Annual Report will show that progress has been made, and that the placing upon the Local Health Authority of the responsibility for all patients within their area, who are suffering from any form of mental illness or defect has already proved the value of such action.

On the 31st December, 1949, there was a total of 2,273 such patients, of whom 1,203 were residing in the City.

It is pleasing to note how many of these patients are leading satisfactory lives within the normal life of the community.

These cases will be reported more fully later in this report.

Constitution and Meetings of the Mental Health Sub-Committee.

Before the inception of the Service on the 5th July, 1948, the Health Committee appointed a Mental Health Sub-Committee, consisting the whole of the members of the Health Committee, and two members co-opted from the Salford Local Medical Committee.

The Committee meets once a month, when a report on the work of the Mental Health Service is presented by the Medical Officer of Health.

The responsibilities thrown upon the Local Health Authority by this enactment are as follows :—

(a) The initial care and removal to hospital of persons who are dealt with under the Lunacy and Mental Treatment Acts.

(b) The ascertainment and (where necessary) removal to Institutions of Mental Defectives, and the supervision, guardianship, training and occupation of those living in the community.

(c) The preventive care and after-care of all types of patient so far as this is not otherwise provided for.

For the purpose of carrying out these duties the following detailed arrangements were necessary.

1. The provision of the services of " Duly Authorised Officers " for the purposes of Sections 14, 15, 16 and 20, of the Lunacy Act, 1890.

2. The provision of the services of " Duly Authorised Officers " for the purposes of the appropriate sections of the Mental Treatment Act, 1930.

3. For the following purposes under the Mental Deficiency Act, 1913 :—

Section 30 (a) : The duty of ascertaining what persons within their area are defectives subject to be dealt with under the Act.

Section 30 (b) : The duty of providing suitable supervision for defectives ascertained in accordance with paragraph (a), and, if supervision affords insufficient protection, of taking steps to secure that they are dealt with by being sent to institutions or placed under guardianship.

Section 30 (c) : The duty of providing suitable training or occupation for defectives who are under supervision or guardianship.

Section 30 (d) : The duty of making provision for guardianship by orders under the Act.

Premises and Staff.

The offices of the Mental Health Service are situated in the Health Department, 143, Regent Road, Salford, 5.

The Health Committee have appointed the undermentioned Staff for carrying out the duties of the Mental Health Service :—

One Senior Mental Welfare Officer and Duly Authorised Officer (Male).

One Duly Authorised Officer and Mental Welfare Visitor (Male).

One Duly Authorised Officer and Mental Welfare Visitor (Female).

One Mental Health Visitor (Female).

One Shorthand Typist (Female).

One Supervisor of an Occupation Centre (Female).

One Assistant Supervisor of an Occupation Centre (Female).

One Assistant at an Occupation Centre (Female).

One part-time Domestic Assistant during mid-day meal time (Female).

Refresher Courses during the year were attended by two Duly Authorised Officers, the Mental Health Visitor, and the Supervisor of the Occupation Centre.

It is the intention of the Committee to encourage their staff to attend further Refresher Courses.

As suggested by the Ministry of Health the Mental Health Service for this City is formed as one unit, which enables each of the first four mentioned officers to obtain a full knowledge of each section of the work.

During the year this has been found advantageous to the service, and of benefit to the patients.

Co-ordination with Regional Hospital Boards and Hospital Management Committees.

A close liaison has been built up between the Mental Health Service, the Regional Hospital Board, and Hospital Management Committees, with advantage it is believed to each service.

As from the 5th July, 1948, arrangements were made with the Hospital Management Committees for the Mental Health Service to carry out the supervision of patients on trial, or on licence from mental hospitals or institutions for mental defectives.

These patients are regularly visited and reports made to the respective hospital or institution committees.

Each Hospital Management and Institution for Mental Defectives Committees has been informed that the Department is willing to consider sympathetically any request they may make regarding any of their patients.

Duties Delegated to Voluntary Organisations.

While being mindful of the value of voluntary associations, we have not delegated any of our duties to such bodies, nevertheless we do work in conjunction with them to the benefit of the service.

In April, 1949, the National Association for Mental Health, closed its Manchester office. The case notes of those ex-service patients who reside in Salford were forwarded to this Department for continued assistance and visitation.

Account of Work Undertaken in the Community.

(a) Under Section 28, National Health Service Act, 1946 ; prevention, care and after-care.

(b) Under the Lunacy and Mental Treatment Acts, 1890-1930, by Duly Authorised Officers.

(c) Under Mental Deficiency Acts, 1913-1938.

- (i) Ascertainment, including number of defectives awaiting vacancies in institutions at the end of the year.
- (ii) Guardianship and Supervision.
- (iii) Training.

At the end of the year there were 2,273 Salford cases of mental illness, of whom 1,231 came within the category of mental illness and 1,042 under mental deficiency.

Of this number 1,203 patients are residing in the community.

Mental Illness and Mental Deficiency.

Appropriate statistics as appendage :—

Mental Illness.	<i>Male.</i>	<i>Female.</i>
In Mental Hospitals	357	416
Under Home Supervision	16	30
After Care.....	129	126
Those for whom the Health Authority may be called upon to take action under the Lunacy or Mental Treatment Acts	73	84
Total ...	1,231.	

Mental Deficiency.	<i>Male.</i>	<i>Female.</i>
In Certified Institutions	167	130
Under Statutory Supervision.....	180	149
Under Voluntary Supervision	163	127
Attending Occupation Centre	18	19
Under Guardianship	2	1
On Licence	9	20
Cases not on register, but for whom the Authority may become responsible	22	35
Total ...	1,042.	

The duties arising from the care and supervision of these patients may be summarised as follows :—

1. The tabulating and recording of patients already known to the Department.
2. Domiciliary Services, i.e., the ascertainment of cases of mental illness and mental deficiency.
3. The statutory supervision, training and occupation of defectives in the community, those on licence from institutions, or under Orders of guardianship.
4. The obtaining of detention and reception orders under the Lunacy and Mental Treatment Acts, 1890-1930, and the Mental Deficiency Acts and Regulations, 1913-1948.
5. The conveying of patients suffering from mental illness, or mental deficiency, to hospitals or certified institutions.
6. The maintenance of a home supervision service for those patients who, by the co-ordination of the doctor, relatives and the Department, can be cared for at home and this prevent, wherever possible, admission to hospital.
7. Provision of an after-care service for patients who have been in hospital for mental illness.
8. The maintenance of a service outside ordinary office hours in order to deal with cases requiring urgent attention.
9. The obtaining of statistical ascertainment and neurological reports of patients admitted to hospitals or institutions.
10. The making of reports on patients granted leave of absence on trial from hospital, prior to a probable discharge.
11. The making of reports on home conditions and prospects of employment relating to patients who are due to appear before the respective hospitals committees with a view to being discharged.
12. The making of reports regarding patients from certified institutions who are allowed absence on licence for the purpose of taking up employment, or for those granted short holiday licence.

13. The making of statutory and periodic reports.
14. The making of statutory reports on those patients residing in the community or under Orders of guardianship.

Section 28 of the National Health Service Act, has for the first time laid down in concrete form, the prevention, care and after-care of those patients who suffer, or have suffered from mental illness.

To enable this part of our work to function more successfully, there are obstacles to overcome such as housing, the provision of more Psychiatric Clinics, and a Convalescent Home.

During the year the Department have been able to assist many patients following their discharge from hospitals, such assistance is classified as shown below :—

Assisted toward obtaining employment	22
Attendance at the Rehabilitation Centre at Denton.....	6
Exchange of houses	4
Provision of household effects	3
Provision of clothing.....	9
Provision of bedding	5
Increased benefit from the Assistance Board.....	4
	—
Total	53
	—

The Department make a point of visiting all patients discharged from Mental Hospitals.

This action is taken so that the patient may be assisted in connection with home conditions, employment, payments from the National Assistance or National Health Insurance Boards, etc.

There were 210 patients admitted to Mental Hospitals during the year 1949.

I give below particulars of these patients :—

Married	120
Single	63
Widowed	27
	—
Total	210
	—

Their age groups were :—

	<i>Male.</i>	<i>Female.</i>
Under 20 years.....	3	3
21 years to 30 years	24	20
31 „ „ 40 „	20	20
41 „ „ 50 „	18	22
51 „ „ 60 „	15	15
61 „ „ 70 „	10	18
Over 70 years	10	12
Total ...	210.	

Occupation Classifications.

	<i>Male.</i>	<i>Female.</i>
Skilled or black coated workers	10	5
Semi-skilled workers	25	8
Unskilled labourers	61	14
Housewives	—	71
Retired or no occupation.....	5	11
Total ...	210.	

The total number of cases reported was :—

Male	124
Female	129
	—
Total	253
	—

In addition to those admitted to Mental Hospitals it was found that in nine instances the patients reported were found to be suitable for the “ Homestead,” Stott Lane, Salford, 6, and were admitted thereto.

Four cases were admitted to the Ladywell Hospital.

Discharges and Deaths.

During the year there were 132 patients discharged from Mental Hospitals being :—

Male	70
Female	62
	—
Total	132
	—

Deaths of patients in Mental Hospitals during this period numbered :—

Male	71
Female	60
	—
Total	131
	—

Of the patients admitted and discharged during 1949, I find that the average time spent in hospital was twelve weeks. This low average was brought about by a number of voluntary patients who left the hospital soon after admission.

No patients have been reported to us by Hospital Committees, who are allowed home on a trial period prior to discharge.

I am of the opinion that the Mental Health Service is now in a position skilfully to lead this class of patient through the critical change over from hospital life to home life.

It would be of great advantage if hospitals would forward to the Medical Officer of Health, a short history of the patient about to be discharged, which would assist in patient’s rehabilitation.

There are also the patients in Mental Hospitals, who have been found fit for discharge, but whose relatives are not anxious to have them.

I believe the After-care Service can be of much assistance regarding these patients :—

- (1) To encourage relatives to accept patients home again.
- (2) To fully operate the After-care Service in the patients' best interest.

Although the need is great, no new Psychiatric Clinic was opened in the City during 1949.

There is at present a waiting period of about seven weeks between the time of making the appointment and the patient seeing the psychiatrist.

I believe the time is opportune for each health authority to have its psychiatric clinic staffed by its own psychiatrist and psychiatric social worker.

Then, and only then, can the health authority be satisfied that those patients residing in the community for whom they are responsible, are receiving the treatment applicable to their condition and there are many requiring such treatment.

The non-provision of such a clinic must ultimately necessitate the admission of many patients to mental hospitals, thus bringing about dislocations of home life and absences from employment.

Aged Patients.

The hope we expressed in our Report for the year 1948, regarding the treatment of aged people suffering from senility has not come to fruition.

It is a saddening thought for any officer, who is daily coming into contact with these patients, that they are unable to deal with them without having to resort to the Lunacy Act.

These patients are not mental patients in the truest meaning of the term.

This is one class of patient which I hoped would receive early consideration after the National Health Service Act came into operation.

The gradual breaking down of misgivings and prejudices regarding the admission of younger patients to a mental hospital is fully understood, but to admit to these hospitals on certificates under the Lunacy Act, senile patients who have come to the fullness of life, who throughout their years, did not at any time suffer from any form of mental illness appears to be the wrong procedure.

A report relating to " Admission to Mental Hospitals " was placed before the Committee a few weeks ago.

Convalescence from Mental Illness.

The provision of convalescent treatment for selected patients who have suffered from mental illness is an excellent idea provided that it is carefully supervised.

There are several classes of patients which I feel deserve special consideration.

1. The patient who following the birth of her child has to be admitted for mental illness, usually under Section 5 of the Mental Treatment Act, 1930.

To discharge these patients from a mental hospital direct to their home, is most unsatisfactory.

2. The patient who has borne several children, and has spent her life within the four walls of a house not in very salubrious surroundings and who has to be dealt with under the Lunacy Acts, surely merits consideration as suggested upon discharge from hospital.

I would go even further than this and see that some kind of help was provided so that the patient returned to a clean and tidy home.

3. I would desire to mention the housewife whose environment throughout life has been sordid. They have brought up families and given of their best.

The time has now come when they are physically and mentally unwell, but refuse admission to hospital.

These persons could be greatly assisted by a period of convalescence.

Most male patients appear to desire an early return to some form of employment, and when assisted to this end, show promise of ultimately leading a normal life.

The patients who cause concern are those for whom relatives make application for their discharge under Section 77 of the Lunacy Act, before recovery and whose return to home life is fraught with difficulties.

Many of these patients require psychiatric treatment following their discharge and could then be referred for convalescent treatment.

The inclusion of suitable senile patients for such treatment, while being an excellent idea, would call for consideration.

During the year we have had senile patients reported as "suffering from mental illness." The difficulty of having these patients admitted, has to be explained to relatives, who inform is that the care of these patients is now placed upon the Regional Hospital Board, and should they be admitted they would refuse to consider having them home again.

Nevertheless, our duty is toward the patient requiring hospital treatment.

I can state, however, that there are mentally mildly confused senile patients being cared for by relatives. These relatives do not desire the patients admission to hospital, but when visited show signs of strain and anxiety. A period of convalescence for these patients would provide the relatives with the rest they require and enable them to carry on when the patient returns home.

Whilst on this subject may I be permitted to mention a matter which I think is also worthy of consideration. Most Authorities have under their supervision, patients who are on licence from various certified institutions.

These patients are allowed two weeks holiday a year, in addition, there are those who following illness require a period of convalescence.

We find that the hostels who have cared for these patients in the past are now only able to grant us few vacancies which makes it difficult to arrange suitable dates to meet the wishes of the patients' employers.

These patients pay for their holidays out of monies saved during the year out of their wages.

The patients on licence requiring convalescent treatment following an illness, are at the present, usually returned to their respective institutions.

Now the question of a period of convalescence following illness is being studied, it may be found that the foregoing regarding patients on licence would assist in coming to the decision that the Regional Hospital Board could provide a suitable Home and include these patients in their Scheme.

Mental Deficiency.

The work relating to mental defectives has during the year been satisfactory and interesting.

It has been possible to trace many patients, who during the war years, were bombed out and forced to leave the neighbourhood.

I find there are a number of cases whose married life is satisfactory, their children are attending ordinary schools. Others are in regular employment and have held their positions over a period of years.

I cannot perceive that it was intended that these patients should remain under "Statutory Supervision."

During the year nine men and six women have been removed from "Statutory to Voluntary Supervision," and it is intended to continue this method as the occasion arises.

Eighteen new cases were reported during the year ; each has been fully ascertained and records made.

Eight patients have been admitted to certified institutions.

Although we have 745 patients residing in the City it is pleasing to find that the number awaiting admission to institutions is only six males and six females.

It has not been found advisable to accept without careful consideration all requests for a person's admission to an institution and I believe that such steps should be taken only after the intermediate stages have not been successful.

It has been found in Salford that attendance at the Occupation Centre has proved most satisfactory, as will be seen under Occupation Centre.

It would be more satisfactory if social workers of all classes refrained from requesting the admission to certified institutions of patients concerning whom they are not fully informed.

They do not appear to have any idea of other steps which may be taken.

There are two classes of patients of whom we hear so little. These are cases which might be reported by the Education Committee.

The first are those children who before leaving school could be reported to the Health Authority as being persons who will, or may, require "Voluntary Supervision" after leaving school.

The second are children between the ages of two and five years, found to be sub-normal, who could be reported for Voluntary Supervision.

I think this is a desirable step which would enable the Department to ascertain such cases, and should the occasion arise we could place them in an Industrial or Nursery Centre.

Guardianship.

We have only two cases under Orders of Guardianship and carry out the supervision of one other for another Authority.

The necessity of placing patients under guardianship does not arise in the same way as before the 5th July, 1948.

Their financial circumstances are now the obligation of the National Assistance or Insurance Boards, furthermore, the placing of all patients under the care of Local Authorities has made it easier to keep under closer supervision the home conditions of the patients.

Licence.

There are now 29 patients on licence, including those on licence in the City from other Authorities. Their conduct on the whole is satisfactory, and it is expected that several will be discharged from their Orders in the near future.

The conditions of employment are satisfactory.

These patients are on trial as wage earners in the community and should as nearly as possible be treated as such.

Holidays were arranged at Ambleside, Cumberland, during the months of July and August for the patients on licence, each paying his or her own rail or bus fare, and maintenance.

Occupation Centre.

The staff at the Broughton Occupation Centre has been increased during the year by one Assistant to the Supervisor.

The number of patients on the register is now 37.

I am pleased to report that two of the patients who were on the waiting list for admission to institutions have shown marked improvement in conduct and ability, making it possible to withdraw their names from the list.

Four patients who attained the age of 16 years whose parents considered taking them away from the Centre, were interviewed and as a result each child was assisted in obtaining employment and is proving satisfactory.

The granting of travelling tokens by the Committee has greatly assisted in the attendance at the Centre.

The children are medically examined at regular intervals and any reports made for treatment are attended to.

The presence of parents at these examinations and their spoken appreciation, show how pleased they are that their children are receiving the same consideration as those attending ordinary schools.

We have had two children examined with a view to their denotification, without success ; nevertheless, a watchful eye will be kept for any child to be considered suitable for such examination.

During the year, papers on Statutory and Voluntary Supervision, Occupation Centre and Home teaching, have been written and distributed to members of the Committee and other interested persons.

Two lectures have also been given to Student Health Visitors.

On the 20th July, 1949, an outing was arranged for the children. They were taken by a saloon bus to Wythenshawe Park, where refreshments were served and games were played, and on the 20th December, a Christmas party was held at the Broughton Centre, which was also attended by the Mayor, Mayoress and members of the Health Committee.

The two parties were free and no expense was incurred by the parents of the children.

Therapeutic Social Club.

As part of the Care and After-care Service, consideration has been given to the formation of a Therapeutic Social Club. It is hoped that it will be possible to inaugurate the Club early in the new year.

Visiting and Reports.

It will be seen that visiting patients' homes and the making of reports is an important part of our work.

During the year the undermentioned visits, reports, etc., have been made :—

Visits.....	2,377
Reports.....	843
Interviewed at Office.....	592

VACCINATION.

I append particulars in respect of persons vaccinated (or re-vaccinated) in Salford during the year 1949 :—

Age at 31st Dec., 1949. i.e., born in years.....	Under 1. 1949.	1 to 4. 1945 to 1948	5 to 14. 1935 to 1944	15 or over. Before 1935	Total
Number vaccinated	1178	35	17	31	1261
Number re-vaccinated ....	...	1	10	68	79
Grand Total					1340

In my report relating to the period 5th July, 1948, to 31st December, 1948, I drew attention to the large reduction in vaccinations in relation to those carried out before 5th July, 1948.

For the sake of clarity, I reproduce the following particulars relating to the year 1947, as follows :—

Number of vaccinations during the year 1947	2,879
Number of vaccinations during the period 5th July, 1948, to 31st December, 1948 (approximately six months).....	680

It will be noted that the year 1949 showed no improvement in respect of vaccination over the experience for the last six months of 1948.

In my Annual Report for the year 1948, I drew attention to the disadvantages which would result from a continuance of a low rate of vaccination, and since then I have seen no reason to modify my views. It is only fair to point out, however, that the Minister of Health did not fix the fees payable to General Practitioners in respect of notifications of vaccinations until December 1949, and therefore, that no experience of the payment of these fees could be gained during that year. It is possible that a considerable increase in vaccination may result from the Minister's decision. It is regretted that it was not possible to commence the system of vaccinating children at the Local Health Authority's clinics during 1949, but it is hoped to make a commencement early in 1950.

AMBULANCE SERVICE.

The following figures show the extent of the work carried out by the Ambulance Service during the year ended 31st December, 1949, namely :—

	<i>Ambulances.</i>	<i>Cars.</i>
(1) Number of vehicles at 31st December, 1949.....	12	3
(2) Total number of journeys during the year	22,284	7,260
(3) Total number of patients carried during the year...	37,273	10,390
(4) Number of accident and other emergency journeys included in (2) during the year.....	2,256	—
(5) Total mileage during the year	189,748	64,621
(6) Number of paid whole-time staff at 31st December, 1949.....	48	

The disposition of the ambulances and cars was generally similar to that which obtained during the previous six months, namely :—

<i>General Ambulance Service—</i>	<i>Ambulances.</i>	<i>Cars.</i>
At premises of the Central Garage, Buile Hill Park, Salford.....	9	2
<i>Infectious Diseases Service—</i>		
At Ladywell Hospital	3	—

The Ambulance Service has proved to be adequate for the needs of the area and to provide mutual assistance when required by outside authorities. Although, without detailed enquiry into individual cases, there has been no direct evidence that the Service has been used otherwise than by persons who are unfit for travel by the ordinary transport services, a doubt lingers in one's mind as to whether in each of this vast number of instances in which the Ambulance Service has been used there has been a completely *bona fide* case for its use.

The Council will realise, however, the difficulties of obtaining evidence at the time of use, and the policy of the Department has been to err, if at all, on the side of the patient. It is felt that the best means of preventing or curbing misuse of the Ambulance Service is by discussions with those who are in a position to control the requisitions for vehicles, i.e., senior officers of the hospital service, general practitioners, and the midwifery and nursing professions. It is hoped that co-operation with the organisations and professions referred to will assist in preventing misuse of the service.

SCHOOL HEALTH SERVICE REPORT.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

Mr. Chairman, Ladies and Gentlemen,

“ If we have reverence for childhood, our first specific rule is to make sure of a healthy bodily development.”

DEWEY.

Our aim is to promote a glowing state of happy health, and to secure two freedoms for our children—freedom from sickness and handicap. The health of the Salford school child is surprisingly good. Whilst we may glibly speak of them as ‘ school ’ children an analysis of the time spent in school by a group of Salford children showed that less than one-eighth of their total life, or 1,000 hours, were spent at school in one year. The rest of the time, 7,760 hours, was spent out of school, subject to other influences. Let us consider their *home and social environment*. We under-value the effect of home and social conditions which make or mar our children.

When we enquire about one small but important aspect, holidays, we find that one-fifth of the children have never been out of the area in which they live ; one-third have had nothing more than an occasional day trip.

Or take the *economic condition* of some families. We find that the wage of the father, if he is an unskilled labourer—and there are many such—is low. Here are some examples :—

Weekly rate of pay (five day week) for unskilled adult male workers.

<i>Industry.</i>								£	s.	d.	£	s.	d.
Engineering	...	...	...	...	...	...	...	4	12	1			
Rubber	...	...	...	...	...	...	...	4	15	6			
Soap Manufacture	...	...	...	...	...	...	...	4	18	0	—	5	0 0
Glass Manufacture	...	...	...	...	...	...	...	4	10	0	—	5	0 0
Dairy Workers...	...	...	...	...	...	...	...	5	3	0	—	5	6 0
Cotton	...	...	...	...	...	...	...	4	16	1			

These figures have only to be stated for it to be realised what little money there is, even with family allowances, to feed, clothe and bring up children. Obviously, children do not depend entirely on school for their full health or education. The story books which the parent can buy, the toys which interest the child, the family holiday at Blackpool, little extras such as fresh fruit and recreations—all these may widen his outlook and add to his store of knowledge, but they cost money.

It was good that there was a high level of employment during the year. The 'decasualisation' of the dockers, whereby they are assured of a minimum weekly wage of 88s., must have a stabilising effect on the family finances, and provide a welcome change from the years of depression with chancy employment. There still is, however, the background of the *bad housing*



The street their playground.

conditions. The restricted space for play and the far-from-smokeless air—these are all unhelpful. Cold bedrooms, the outside lavatory, the single water tap—such lack of amenities is unhelpful to health.



Junk playgrounds in areas of blitz and blight.

At the lower end of the scale are the *handicapped families* where the parents have bad social habits, poor morale, and often low mental condition. An example of how much depends on the parent is seen in one Salford street, of poor property. Of three houses, one is dirty, neglected and bug-ridden. The second shows slight infestation and some neglect. In the third the rooms shine like a palace, and the children can be brought up to reach the radiant health which we so much want. This example of different parental standards in one street, where the physical structure of the houses is the same, shows a part of the problem we face.

What constructive measures can be made ?

The first principle of the work of the School Health Service in recent years has been to teach, stimulate and encourage, by every possible means, the *parents* in the better care of their children. More and more emphasis has been placed on this, rather than on direct care of the children. This has been a special feature of our work. Many means of encouraging parental interest and care have been devised ; a *parents' club* for parents of handicapped children, various *mothers' clubs* which we hold in our clinics ; the *home observation scheme* (may I direct your attention to the description, in the report, of this venture).

In the case of the spastic child effort has been made to provide the parents with the best teaching available from those with expert knowledge of the subject.

I was much impressed, some years ago, by the work of a Salford mother who under the skilled direction of Dr. Irene R. Ewing, taught her deaf infant to lipread two hundred words. This showed to me that if we could only secure and stimulate the interest of the parent and, indeed, other members of the family, in the child, and improve the home environment in which the child grows up, much good can be done, not only with handicapped children but with ordinary boys and girls.

We must raise the standard of health and resistance to disease of the children. Here are simple ways of doing this :—

1. We must *maintain and increase the high protein value in school meals* with milk, meat, eggs, fish, liver.

2. We must make every endeavour to see that children have their *full allowance of milk*.

3. Recent research has shown that the old-fashioned *cod liver oil* is of great value in building up resistance to infection. Preparations such as *rose hip syrup* may be given to advantage.

4. We must *block the channels of spread of infection*. We must render the reservoirs of infection non-infectious. Much of this is the concern of public health workers such as the sanitary inspector.

5. There should be a special lookout for signs of infectious diseases and *discharging ears and noses*.

6. *Good ventilation* will help in lessening risks of infections.

7. Parents must see to it that every child has his *own handkerchief*. It may be useful to have a supply of paper handkerchiefs for children who develop a running nose in school.

8. We must continue to encourage the parents to provide conditions where the children can *sleep* healthily and restfully.

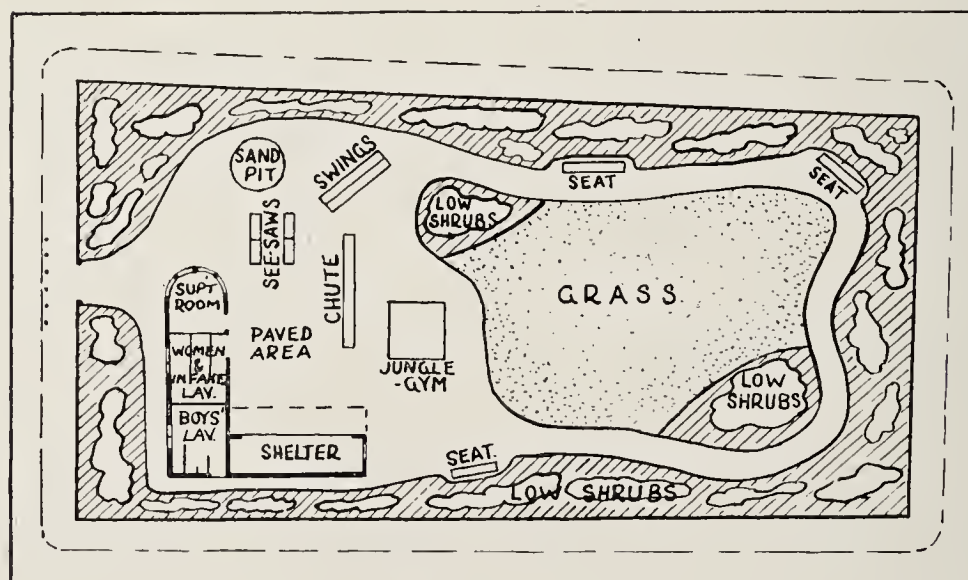
9. Provision of *good footwear* is expensive, but it is so important to see that the children have well-fitting shoes, with ample space for growing feet, and that the footwear keeps out the wet.

10. In this great area we must make life more worthwhile by the



(Photographs kindly supplied by F. L. Bond, Esq.)
Cricket in the clearing.

provision of *open play spaces*. Here is an idea for a *children's playground* seen on this Salford plan.



11. Someone should really take up the provision of cheap *family holidays*, on holiday camp lines, at a cost which is within reach of the pockets of the lowest paid worker.

12. A continuous effort should be made through all available channels of *health education*. One way of doing this is by the distribution of attractive coloured booklets "Starting School." Another is by the encouragement of Parent-Teacher Associations. Critics say this means preaching to the converted, yet the converted still welcome further enlightenment and education on that difficult yet most satisfying art and craft of bringing up a healthy family.

During the year the total *deaths* occurring in children between the ages of five and fifteen years was 14, compared with 23 in 1948 and 27 in 1947. Three of the violent deaths reported were caused by: (a) shock following sudden immersion in water; (b) acute pulmonary oedema following immersion in water; (c) asphyxia due to aspiration of vomit while under anæsthetic for operative treatment for burns to both legs, caused by the explosion of a can containing inflammable liquid (black lacquer) with which the boy was attempting to light a slow combustion stove.

The deaths of a further three children were classified under 'other defined diseases': (a) Splenic anæmia; (b) Hodgkin's disease; (c) Acute myelocytic leukæmia. One child died from encephalitis.

Interesting developments have taken place during the year, some of which are described in the following pages. A comparative audiometric survey, involving the use of three audiometers, has been carried out by a special worker. Results have shown with school children that the new "sweep" test may become the group hearing test of the future. The establishment of *minor ailments clinics in schools* was limited by lack of accommodation from establishing further. We are determined to carry out our firm intention of bringing, as far as possible, the services to the child, rather than the child to the services. This will reduce the loss of time caused by children travelling to clinics, and avert the danger of crossing roads. An unusual example in support of this principle occurred the other day. Two boys, who had travelled some distance to the clinic, appeared 'lost.' After searching they were discovered in the basement billiards room, provided by members of the staff, having a quiet game of snooker! We have many examples where children creep unwillingly to clinics, and as we care for the minds as well as the bodies of the children we do not want them to miss lessons and activities in school.

Your policy of providing the best possible specialist services has been continued. It becomes more important, as time goes on, for our children to have the fullest and finest specialist investigation—for example, a study of the *nutritional state* of the children showed that two had very low hæmoglobin rates—a fact which would not have become known to us if we had relied on ordinary methods of clinical examination. The specialists employed by the Regional Hospital Board have given us, as before, splendid service.

The following pages represent some of the story of the care which is given to our children. As Thomas Hardy says: "All the little ones of our time are collectively the children of us adults of the time, and entitled to our general care."

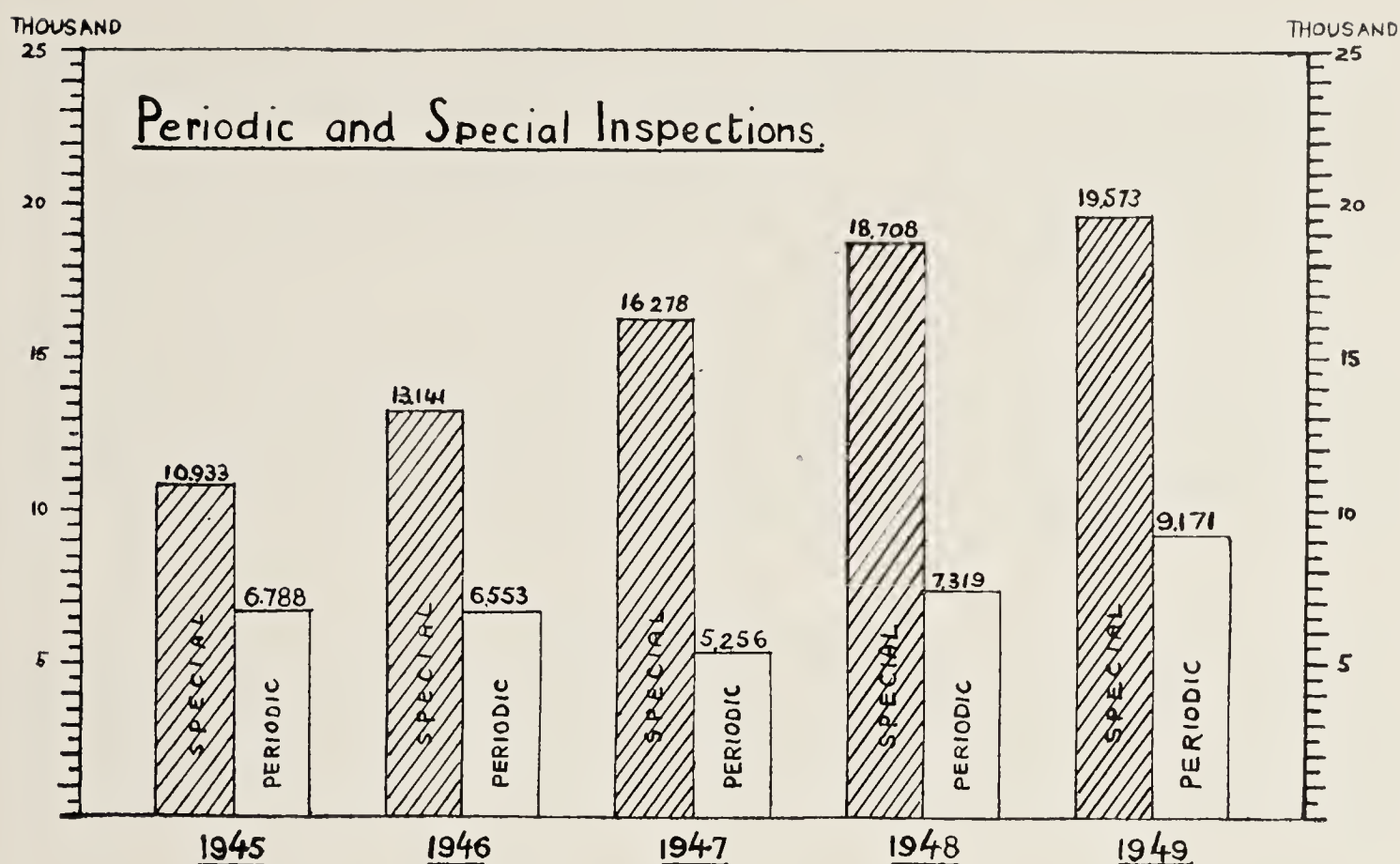
To all members of the staff, medical, nursing and administrative, the teaching and administrative staffs of the education department, general practitioners, and, last but not least, those parents who have done a good job in caring for their children, I would like to pay tribute.

I have the honour to be,

Your obedient Servant,

J. L. Brown

School Medical Officer.



PERIODIC AND SPECIAL INSPECTIONS.

General Condition of the School Children.

Ninety-five per cent. of the children examined during the past year were regarded by the school medical staff as being of good or average general condition (nutrition), 43 per cent. good, 52 per cent. fair, five per cent. poor.

Routine and Special Inspections.

The number of children examined in school at periodic medical inspections increased from 7,319 in 1948, to 9,171 in 1949, and the number of children examined at school clinics increased from 18,708 in 1948, to 19,573 in 1949.

Excluding Dental Disease and Infestation with Vermin, 1,881 or 20·5 per cent. of the children examined at the periodic medical inspections were found to require treatment and in about one-quarter of these cases some visual defect, other than squint, was present. In 1948, the number of children found to require treatment under this heading was 1,738 or 23·7 per cent.

The large number of children found to have defects of the ear, nose or throat shows the very great importance of this work. During periodic medical inspections in school 608 were found to require treatment and 1,758 were required to be kept under observation. At the special inspection clinics, 2,949 children requiring treatment were seen and 633 although not in need of treatment, required to be kept under observation.

Home Tuition.

Miss Hall, our travelling teacher for "Home-Bound Children," commenced this new work on 1st September, 1949, and at present five children who are unable to attend school have school brought to them. The children show pleasure in the visits of teacher twice each week and the parents give every help and appear to be much encouraged by this further interest in the welfare of their children.

The five children have the following disabilities :—hydrocephalus, tuberculosis of the spine, congenital heart disease, spina bifida, spastic diplegia.

Minor Ailments Clinics in Schools.

Minor ailment clinics are at present open in the following schools :—

Blackfriars Road.

Marlborough Road.

St. Ambrose.

Broughton County Secondary.

Barr Hill Open Air School.

These clinics in school not only save the children from crossing dangerous roads and avoid loss of school time, but ensure early attention for all minor ailments. This early attention means that the child recovers from the ailment more quickly and fewer attendances are necessary at the area clinic. The number of attendances at minor ailments clinics was 5,000 less than in the previous year.

Anterior Poliomyelitis.

During 1949 there was another smaller outbreak of this disease which involved twelve children between the ages of five and fifteen years. One child aged six years, with respiratory paralysis, became gradually worse towards the end of the year and unfortunately died on 6th January, 1950.

Report on the Work in the Ear, Nose and Throat Clinic.

Dr. Florence Cavanagh reports :—

We have been able this year to continue with three regular weekly clinics. In addition the special "catarrh" clinic (which was started in 1947 and carried on through 1948) was still being held regularly until the end of February. The doctor in charge was doing this work under a Nuffield Grant, but, on her appointment to a new post in Southport, this research had to be terminated. We have, however, learned much from this intensive study, and armed also with the new range of anti-histaminic drugs, we are able to treat many cases of catarrh by conservative means.

For many years there has been growing concern at the large number of children operated upon for removal of tonsils and adenoids. There is of course, no doubt that some children need this operation and when it is performed on carefully selected cases there is also no doubt about the benefit to the patients. Such children often leap ahead, both in physical and mental development. Unfortunately, there has been a tendency to regard removal of tonsils and adenoids as a panacea for the ills of childhood and therefore many unnecessary operations have been performed. Sometimes it is the general practitioner who suggests operation—sometimes the school medical officer and sometimes it is the parents. It is often difficult to persuade the parents that removal of tonsils and adenoids is not indicated, but that alternative and conservative treatment will relieve the symptoms. Many of the cases investigated at the Catarrh Clinic were originally referred to the E.N.T. Department for removal of tonsils and adenoids. It was found that a number could be treated without operation.

We have had in mind for some years the need for a careful survey of the "tonsils and adenoids" problem. The opportunity has now occurred. We were able to start this work in April. Each child who is referred by the school medical officer or general practitioner for tonsils and adenoids, is seen by the aural surgeon for careful examination of ears, nose, throat, post nasal space and larynx, and an opinion is given regarding the need for operation. The patient is then seen by a Pædiatrician from the Department of Child Health, The University, Manchester, who assesses the need for operation on general medical grounds. In those cases where there is a possibility of avoiding operation we are keeping the children under observation. Some are re-examined in two to three months, some in six months (in each case by both the specialists). We hope by this means to prevent

unnecessary surgery. We have been pleased by the way in which the parents have appreciated this extra supervision. They have brought their children along regularly for the periodical reviews. If we can effectively reduce the number of cases listed for operation, we shall soon be in that happy position where any child who requires removal of tonsils and adenoids can expect to have the operation performed within a few weeks of the decision being taken. It is wrong for any youngster to be compelled to wait twelve to eighteen months for an operation to restore his health.

There is a great need still for increased physiotherapy, especially in the form of breathing exercise classes. Much of the catarrh in childhood persists because the child has never been taught to breathe properly. A nose which is not being used cannot be healthy. There is, alas, a long waiting list of children in this category.

The special class for Partially Deaf children has been one of our greatest joys. We are, however, anxious now to extend this type of help to the underfives. It is impossible for one teacher to deal with children ranging from three to fifteen years, and it is important to give these handicapped children all the help possible from the very start. We have at present four or five small children who cannot be dealt with. One, a boy, has recently recovered from tuberculous-meningitis. Unfortunately, his illness has caused severe deafness and he will need to attend a residential school for the deaf. At the moment, however, he requires considerable medical supervision at Hope Hospital and we cannot, therefore, arrange for his education at the deaf school. As a result his speech is rapidly deteriorating. If we had a second class for partially deaf pre-school children we could tide the boy over this difficult and protracted convalescence, saving and even developing his speech.

Ophthalmic Clinic.

Dr. John Scully reports that during the past year this Clinic has been held five times weekly at the Education Offices. Children attend this clinic who suffer from defective vision, squint and external diseases of the eye. They are referred by the School Medical Officers in their routine inspection of the schools, by general practitioners and opticians, by the teachers, and in increasing numbers by the parents themselves. Children of all ages, from birth to leaving school, including secondary schools, are referred for treatment.

The clinic has been without an Orthoptist from July 31st, 1948, until 31st December, 1949, and the orthoptic training of squint has had to be temporarily discontinued during this period ; however, the treatment of amblyopia by occlusion has been continued with gratifying results. The operative treatment of cosmetic squints in the absence of orthoptic treatment has not been interrupted during the past ten months. Two or three cases at fortnightly intervals have been operated upon at Hope Hospital.

REFRACTION CLINIC. Children attend who are suspected to be suffering from some defect of vision. The normal attendance is three visits. At the first, a test of vision is taken and any squint or other external abnormality is noted. If a defect of vision is found mydriatic eye drops are given for daily application for a week. These drops affect, temporarily, the sight of the child for reading and close work, but the distant vision is unaffected, so the children can attend school but are unable to read. In the case of Grammar School and High School children, drops are only given for one or two days so as to avoid interference with their studies. At the second visit a refraction and complete examination of the eyes is made, and a subjective test with lenses is completed, and finally a prescription for glasses is given where children are illiterate and are too young to do the " E " test. The children who know their letters or are able to do the " E " test are asked to make a third visit to the clinic when a post-mydriatic test is done and a prescription is made.

In accordance with the National Health Insurance Act the parents are instructed, on receiving the O.S.C.2 form, to take this and the child to an optician on the National Health Insurance list. When the glasses are fitted and supplied by the optician the child is asked to attend again for a test of visual acuity and the fitting and lenses are checked.

By arrangement, the opticians are notifying the clinic when the glasses are fitted, so that the further supervision is ensured. Post cards are supplied to opticians on application.

Artificial eyes are now supplied free of charge, and it is gratifying to note that none of the few children to whom this applies has been without an "eye."

A high percentage of cases referred attend this clinic and are accompanied by their parents or a responsible adult, and this number is increasing. The parents are invariably co-operative and willingly follow the instructions and advice given, obtaining glasses if recommended. There is a noticeable diminution in prejudice against wearing glasses since they were provided free. This minimum prejudice from parents and children is generally due to fear of accidents and breakages, or fear of teasing from other children; but most frequently prejudice is unspecified against the wearing of glasses. This is overcome where the advantage to be gained by better sight is demonstrated.

All repairs and adjustments are dealt with immediately and are not placed on the waiting list. All cases sent as "urgent" by teachers and doctors are given an early appointment, also Child Welfare cases and older children accompanied by parents who are concerned about their children's sight.

The number of glasses prescribed, 1,817, may seem high—it should be noted that these are not all new cases, many being a change of prescription from that which the child has previously been wearing. The number of repairs is similar to that in previous years and these are now attended to more promptly and effectively. Glasses are never prescribed unless essential for the good of the child's sight and for the alleviation of symptoms.

There are a number of children at present in ordinary schools who would be better accommodated in special sight-saving classes. These numbered 38. They are composed of children with high myopia, and other children with diseases or degeneration of the retina. Steps are now being taken to accommodate such handicapped children.

Increasing advantage has been taken during the year of referring cases for further treatment to the out-patient department at Hope Hospital.

DEFECTIVE VISION. Children with defective vision may be divided into hypermetropes, myopes and squints.

HYPERMETROPIA (Long Sight).

These form the majority of cases and may be divided into simple hypermetropia and compound hypermetropic astigmatism. They are defects from birth, and are due to the shape of the eye being short in length from before backwards; and in the case of the astigmatics the curvature of the cornea is not equal over the whole of the surface. Symptoms may be caused at any time in life, but are most frequent when there is increased close work, and consist of headaches, difficulty with close work, reading, sewing, etc., and inability to see accurately what is written on the board when in school. Glasses are usually prescribed for all the time in school and close work at home, but in the higher degrees, they may have to be worn constantly. There is a tendency to improve as the child grows older and troublesome symptoms are avoidable when glasses are worn.

MYOPES (Short Sight).

These include cases of simple myopia and compound myopic astigmatism. Myopia usually shows itself in the slightly older child from 10 years upwards. It is generally due to an increase in length from the front to the back of the eye, and tends to increase during the growing years, especially in the teens, usually ceasing to deteriorate when general growth stops. In some cases it is hereditary and then shows itself at a much earlier age, and is consequently more serious. The main symptom is difficulty with distant vision, seeing the board in school, destinations of buses, though reading and close work may be quite clear. In the early stages headache may be present but not always. Thus the condition is often definitely established before any complaint is made. Glasses are invariably prescribed in these cases and advice is given to wear constantly, because though the children can see to read quite well, excessive close work tends to aggravate the condition. These children are warned against reading too much and especially for too long a time. In early cases one sometimes has to insist on the child wearing glasses as he or she does not realise what good distant vision may mean.

Much time is spent with children suffering from myopia in making sure that the parent and child understand instructions. Typed copies of instructions are handed out in each case. Myopia is more prevalent in the Secondary Schools because of the extra study these schools entail, and because of the longer school life—this being especially the growing period of life, the usual time for Myopia to increase. It is important to try to arrest the progress of the Myopia in the early stages as these children often wish to continue their studies at college or elsewhere—many professions are closed to applicants with a high degree of Myopia. Myopes are invited every six or twelve months, re-examined and their lenses changed according to the progression of the Myopia.

STRABISMUS (Squint).

These patients may be Hypermetropic or Myopic (usually the former) and one eye may turn inwards or outwards (usual the former). The defect is not always obvious to the parent, but when it is, advice is usually sought soon after its commencement. Glasses are invariably prescribed in these cases and constant wear is advised, whatever the age of the child, provided the child is stable on its feet. Parents are usually quite willing to obtain glasses however young the child. After the child has obtained the glasses he/she is referred to the Orthoptist for treatment. This consists in occlusion of the "good" eye in order to improve the vision of the squinting eye, because a squinting eye invariably has defective sight. This treatment may start as early as three years old. The child is seen every 2-4 weeks, and the vision of the two eyes noted. When the vision of the two eyes is equal, occlusion ceases, and then at seven years of age treatment on the synoptophore is started, to develop binocular vision. Often by this time the squint has disappeared, certainly whilst wearing the glasses. In cases where the squint is still present whilst wearing glasses and after a course of Orthoptic treatment, an operation may be necessary to straighten the eye and so cure the squint but this will not improve the vision of the squinting eye if still defective. Operations are now being performed at Hope Hospital fortnightly. The children are admitted for two weeks, then if everything is satisfactory, they are sent home and referred to the clinic for post-operative treatment. They are also seen after operation by the surgeon at Hope Hospital Out-patients' Department. They do no close work for another two weeks, and do not attend school. Then they may resume normal school and home life but are examined frequently until the eye has completely settled down. In some cases they are able to leave off wearing their glasses, but this depends entirely on the state of the vision.

There has been again a large attendance of children under school age. Many of these have squints, and if constant, and the child is safely walking, glasses are prescribed. Thus the child with a squint is seen early, and treatment started. By the time the child

goes to school and starts close work, the squint has often disappeared and so the incidence of squint in later life is considerably lessened. If the squint is not constant in these tiny children and only seen occasionally, Mydriatic drops (dilating) are given for the "good" eye and the child is seen at intervals of two to four weeks. The squint frequently improves and may even disappear.

INTERNAL EYE DISEASES.

These are discerned on internal examination of the eyes under Mydriatic drops, and are comparatively rare. Treatment is advised, and the child is seen frequently. As these are often due to general causes the child is referred to special departments such as the Municipal Clinic, Tuberculosis Department or to Hospital for further treatment which cannot be given at the clinic.

EXTERNAL EYE DISEASES.

These comprise external diseases of the eyes and lids, and are often referred from other clinics. The number of cases varies with the time of the year, such diseases being more prevalent in the spring and autumn when there are cold winds and variable weather. General health is usually lower in spring following the winter. The children are examined, treatment advised and given, and they are seen regularly until cured.

Cases of chronic Blepharitis are becoming rarer, due to modern methods of treatment which are applied regularly, and because of persistence in treatment after an apparent cure. It is also due in many cases to the wearing of spectacles for correcting astigmatism. The more serious types of inflammation such as phlyctenular conjunctivitis and ulcers of the cornea, both of which are likely to lead to defects of vision, are also not so frequent. This again is due to modern medicine clearing up the condition more quickly, before permanent injury is done to the eye, and also to the children's persistence in the treatment both during and after the attack. In many cases these are due to low general health and the children are referred to the Sunlight Clinic and ordered vitamins, Cod Liver Oil and Malt.

The acute suppurative conditions are rarely seen now because the child is treated in the early stages before the deeper tissues are involved.

"Styes" are not seen so frequently now, and the milder infections of lids and conjunctivæ are treated and cured before they involve deeper tissues and the condition becomes chronic.

The milder conditions of Conjunctivitis are still seen, but quickly clear up under regular treatment, and leave no after-effects.

These children are rarely advised to be absent from school, as experience teaches that the condition clears up quicker when the child attends school and attends the clinic regularly, which they tend not to do if absent from school. The risk of infection to other children is very remote, except in the rare cases of acute suppurative conditions. In many cases both parents are at work during the day leaving the children to play unsupervised in dirty surroundings, and aggravate their condition by rubbing the eyes. In school, however, under more regular supervision such aggravation is often avoided.

Babies are referred to the clinic from the Child Welfare Department with lachrymal obstructions and slight infections of the eyes dating from birth or the early weeks of life. These quickly clear up with modern treatment when applied regularly by the mother, and more permanent damage to the eyes is prevented.

Cases of lachrymal obstruction which do not improve with lotion and drops are referred to Hope Hospital for probing.

Consultant Skin Clinic.

This clinic provides easily accessible consultant facilities for Salford children with skin disorders and has continued during the year under review. The clinic is available once weekly at Regent Road on Thursdays at 2-30 p.m., and is under the direction of Dr. A. J. Gill. Beds for those children in need of hospital treatment are available in the children's wards at Hope Hospital.

There is, now, a decreased need for hospitalisation of acute cases (e.g., impetigo, septic scabies, infected urticaria), consequent upon improved methods of treatment, but there will always be a need for beds for the more intractable type of skin disease, e.g., psoriasis and infantile eczema and cases where temporary separation from parents and relations is often beneficial.

The most noticeable general trends during the year have been the continued decline in the numbers of cases seen of gross impetigo and infected scabies. I think the provision of facilities (e.g., at Ladywell) for immediate treatment of cases of scabies, and particularly of family contacts, has had a good deal to do with this welcome decline. Contacts are seen and dealt with before the scabetic lesions are secondarily infected by scratching, and the subsequent treatment required either avoided or much reduced.

On the other hand there has been recently a noticeable increase in the numbers of ringworm infections seen, both of the scalp and of the smooth skin. Cases of *Tinea Ton-surans* generally are best treated by X-ray epilation and this is carried out in conjunction with the Skin Hospital, Manchester. Many cases of animal ringworm of the smooth skin are seen also and these respond very satisfactorily and quickly to Undecylenic Acid in ointment form.

The incidence of virus conditions (e.g., *Verrucae*, *Molluscum Contagiosum*, Plantar Warts) remains high and many of these conditions have been established for many months before they are seen.

The end results of cases of congenital capillary naevi treated by Thorium X applications in varnish with or without CO₂ Snow and now followed up for some years, remain very satisfactory.

During the year under review 304 new cases were seen and 318 old cases, making a total of 622.

The distribution by age groups was as follows :—

	<i>Old Cases.</i>	<i>New Cases.</i>
Adults	87	25
School Age.....	191	225
Under 5's	40	54

School Dental Service.

Mr. L. H. Pollitt, L.D.S., reports :—

The new Health Service which commenced on July 5th, 1948, and its impact on the School Service, has been a matter of concern for the Local Authorities who were faced not only with the task of continuing their previous service, but also with the provision of a service for the pre-school child and expectant and nursing mothers.

It was anticipated that there might be a reduction of demand on the School Service owing to the expected drift of patients to private practitioners now that the financial barriers were removed. This view has, however, proved false, and probably owing to the increased pressure of work of the private practitioners there has been no diminution in the demands on the clinics, whilst the drift of dental officers to private practice with its more attractive financial rewards, has made the extension of services impossible and in many cases has resulted in serious reduction of services in operation before the Act came into force.

In anticipation of the necessity of providing extended services, the Committee approved the provision of a new clinic at Encombe Place, with accommodation for a dental surgery and a work room for a dental mechanic, but though the conversion of the premises has now been completed, it will not be possible to avail ourselves of the improvements until further staff is available.

During the first part of the year we were fortunate in having a staff which enabled us to keep all the clinics going, but in the latter half of the year, owing to losses of staff, we have had to close the Murray Street Clinic and the outlook can only be described as gloomy.

During the year, Mrs. Silarajs, Mrs. Levy and Mr. Cropper have resigned and Miss Ward has had to resign her post as dental attendant, through ill health.

In the course of the past year 8,328 children were inspected in school, of whom 6,883 were referred for treatment and 1,210 were referred by School Medical Officers. The total number of children treated was 8,163 for whom 3,814 fillings in permanent teeth and 492 in temporary teeth were done and 1,969 other operations were carried out on permanent teeth. These included all forms of treatment such as crowns, inlays, root treatments, etc. In addition 644 temporary teeth were treated, chiefly with silver nitrate. Under the administration of 5,056 general anæsthetics, 1,491 permanent teeth and 9,084 temporary teeth were extracted. In addition 26 children have been supplied with partial dentures.

ORTHODONTIC SERVICE.

The Orthodontic Service under the direction of Mr. Wild has proved one of the most popular of the dental services and during the year 504 visits were made by children. Up to the present the work has been carried out under considerable difficulties due to lack of accommodation, but these will be removed by the opening of the new clinic at Encombe Place. Unfortunately, we are to lose the services of Mr. Wild in January when he takes up the position of lecturer at the Manchester Dental Hospital, but it is hoped that a successor will be appointed and the work of the department carried on without an appreciable break. At present with only two sessions a week available it is only possible to treat a portion of the children needing attention, and cases needing fixed appliances comprise the bulk of the work.

Foot Health Clinic.

The excellent progress recorded in our previous report has been fully maintained during the past year. In spite of the large increase in attendance last year, we again show a very substantial increase—to the extent of 120 per cent.

The regular foot inspections carried out progressively through the schools are proving a valuable contribution to the all-important preventive aspect of the foot health service. The early recognition of minor congenital and acquired defects enables prompt action to be taken. Where these occur as a result of faults in the type and fitting of the children's footwear, parents have been notified and every assistance rendered to remedy the situation by providing appropriate prescriptions and, when possible, soliciting the co-operation of the shoe retailer.

In the clinical aspects of the treatment of minor defects of the toes, the introduction of simple strip rubber appliances has proved highly successful. It has, however, been found more satisfactory first to achieve the correction by a firmer and more positive strapping and splinting with zinc oxide plaster and felt, using a simple strip rubber appliance as a convenient means of maintaining the correction. One exception to this, however, is in the case of hallux valgus, where the hallux valgus traction sling first devised and introduced at this clinic, promises to be the most satisfactory method of dealing with hallux valgus occurring in children, always provided, of course, that footwear of a suitable type is used in conjunction with the device. We are particularly gratified to report that during the past year a substantial number of corrections have been achieved, and there is every hope that the appropriate appliances will succeed in maintaining this, resulting in permanent cure.

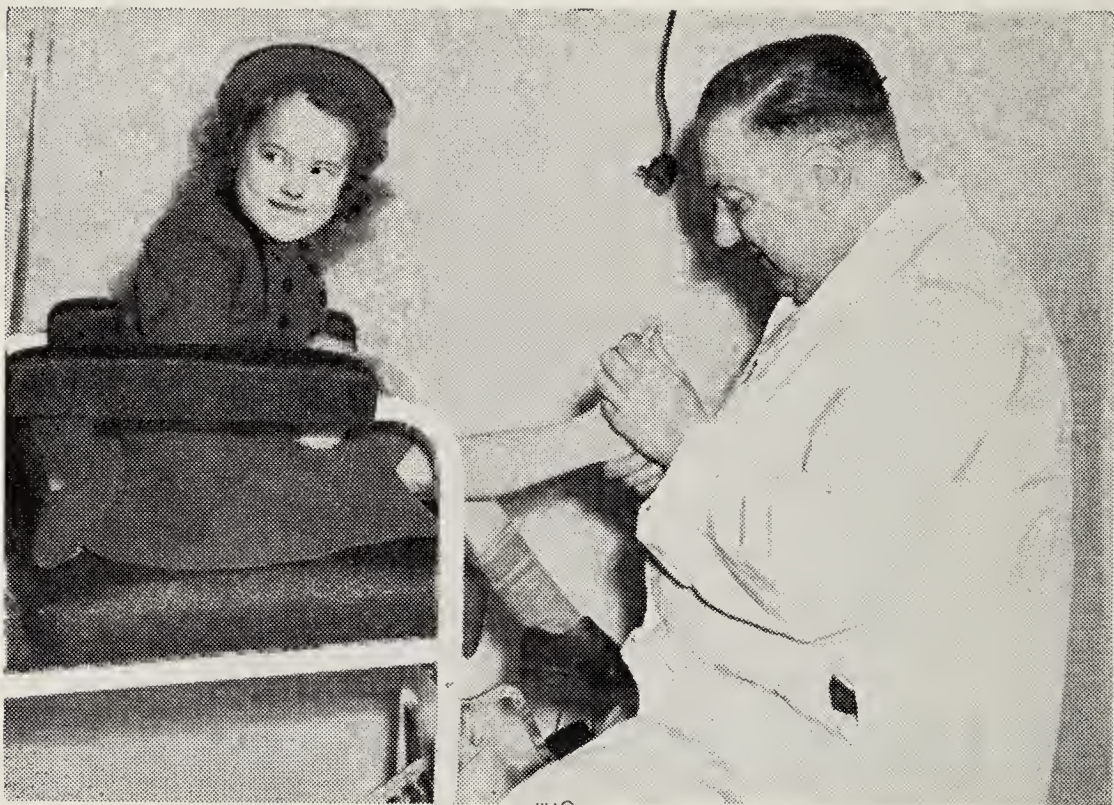


Hallux Valgus traction sling referred to in text.—
A simple strip rubber appliance.

The proportion of defects of the long arch represented by varying degrees of pronation in the feet examined during the past year, are revealed to be unusually high—22·43 per cent. The method of treatment by the wedging of the soles and heels of shoes, whilst proving very satisfactory in a number of cases, has provided substantial difficulties. It is not always possible to get the prescribed surgical alteration satisfactorily carried out. The expense to most parents of this alteration is particularly formidable and proves to be a much too frequently recurring charge on the household budget. The introduction of a department of chiropodial mechanics at Hope Hospital for the processing of all forms of surgical appliances for the feet, has made it possible for the reference to this department of severe cases for the provision of corrective surgical insoles. The fitting of appliances made of Latex milk rubber and various soft leathers for shielding and stabilising the feet has enabled us to treat secondary lesions resulting from gross deformities. The treatment of minor cases of pronation in our own child health clinics by the use of heel socks fitted with cork wedges as a substitute for the previous sole wedging method, has

been introduced. The alterations are carried out on the spot and eliminate the cost of these minor surgical alterations to the shoes devolving on the parents. There is every reason to anticipate that this method will prove satisfactory.

The interest and co-operation of the parents in the treatment of the children's feet has been maintained and increased during the past year.



At the Foot Health Clinic.

The incidence of verrucae continues to decline, a possible explanation being early detection at foot inspections, the stimulated interest and assistance of school teachers in the detection of foot lesions and consequential prompt treatment and prevention of spread.

The co-operation and practical assistance of the orthopaedic surgeon has contributed substantially to the efficiency of this department.

*Analysis of the recording of patients during 1949
show the following percentages.*

	<i>Per cent.</i>
Pronation	22.4
Hallux valgus	11.0
Defects of lesser toes	18.5
Bunions	0.6
Corns and callosities.....	11.4
Metatarsalgia	2.6
Nail defects	4.9
Verrucae	20.4
Chilblains	0.6
Other defects	4.9
Referred to orthopaedic surgeon	2.6

*Cases of severe long arch defects referred to Hope
Hospital for surgical insoles.*

Fitted and in process of being fitted.....	72
Cases outstanding	90

The continuance of the rapid expansion of the foot health service is straining the present facilities to the utmost limits, but the results achieved are so gratifying that no effort will be spared in an endeavour to cope with all demands made upon it,

Speech Therapy.

At the beginning of the year a second speech therapist was appointed to take over the clinics at Langworthy Road School and Encombe Place. Miss Hilary Wolfe commenced her duties at these centres on February 8th. She resigned her post in Salford on July 29th, leaving to be married.

The premises used as a speech clinic at Langworthy Road School are now no longer available. At the beginning of September the Head Teacher indicated that this room would in future be required as a staff-room. This necessitates the finding of new accommodation on the appointment of a successor to Miss Wolfe. Meanwhile, treatment of children attending schools in the Pendleton and Salford, 3, areas has had to be suspended until a further appointment is made.

During the year 81 school visits were made, and also 102 visits to homes.

On March 7th, a talk on speech therapy was given at a meeting of The Parents' Club for Handicapped Children, held at Police Street Clinic. The address contained some advice to parents as to the best way of helping their children to overcome their speech difficulties.

A short lecture on speech therapy in the schools was given to a group of student Health Visitors on March 31st, and again on November 18th, at the Health Department, Regent Road. The speech therapist also gave a further talk on this theme on October 31st, to a group of student nurses from Pendlebury Children's Hospital.

Report on the Asthma Clinic.

The work of the Asthma Clinic has continued during the past year, being concentrated on children who were failing to make progress. In addition routine follow-up examinations were done and nearly 40 new cases were referred by the School Medical Officers.

A summary of the investigations and recommendations is appended, in many cases these were reported to the family doctor by letter.

On the basis of past work the following observations can be made on the needs of these children.

A regular annual holiday in the country or by the sea, to last no less than four weeks, should be available to every asthmatic child whose parents are not in a position to provide this. Appropriate accommodation could be provided apart from the usual convalescent homes.

A few children are reaching school leaving age, educationally backward and still handicapped by regular asthma. Urgent residential schooling and vocational training is required to prepare these children for adult life and wage-earning.

Bad housing continues to aggravate the plight of many asthmatics, in some it could be incriminated as a major ætiological factor.

Many of the milder cases could, with advantage, be followed up at routine medical inspections—the time of the asthma clinic being reserved for new or troublesome cases,

Thirty-one sessions were held during the year, at which were seen 38 new cases and 157 old cases. Forty-one of these children were examined more than once.

	Boys.	Girls.
<i>Investigations carried out—</i>		
X-ray chest	12	1
X-ray sinuses	1	—
Skin tests.....	7	2
W.B.C.	8	2
Throat swab	1	—
<i>Recommendations made—</i>		
Breathing exercises	13	7
Open Air School	5	—
Convalescence	12	3
Ultra-violet light	1	—
Ear, Nose and Throat Consultant	8	2
Better housing	5	3
Psychiatric examination	1	1
Further investigation at hospital	2	1
Antihistaminics	13	4
Number of children discharged as fit	8	2
Condition improved	32	15
No change	18	1
Deterioration in condition.....	5	2

Care of Handicapped Children.

This year it was felt that special appreciation of the efforts of parents with handicapped children should be shown—so that those mothers whose days are taken up with clinic visits, the supervision of home exercises and similar labours of love, would know that their work does not go unnoticed.

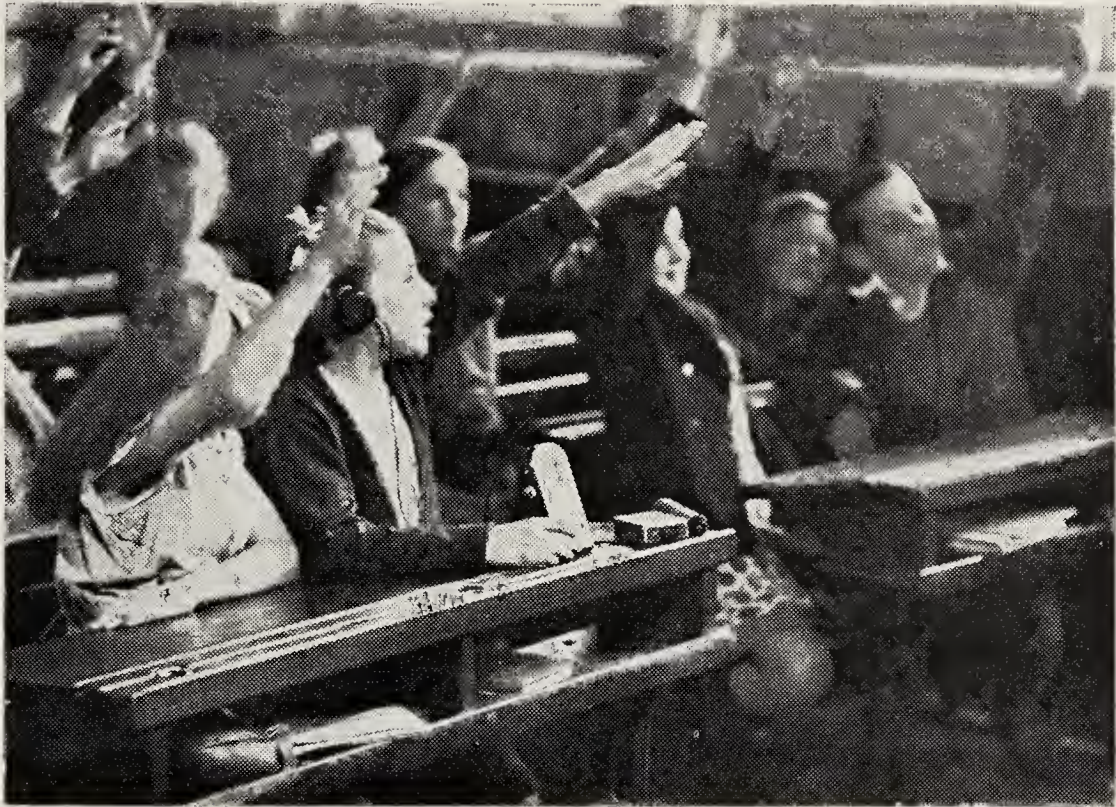
This mark of appreciation took the form of a calendar for the year 1950, sent with a personal message from the Mayor and School Medical Officer, thanking the parents for the “help, encouragement and love” they are giving their children, and congratulating them on their high standard of parentcraft.

Report on the Work of the Special Class for Partially Deaf, Regent Road School.

The special class for children who are deaf and partially deaf is now in its second year and well established as a valuable adjunct to the Health Services. Apart from its function as an educational unit, it has proved to be a useful diagnostic aid. It is very difficult, even with the first-class mechanical aids and assessors in use, to decide accurately how much speech is being heard (as distinct from sounds and noises). It also requires something more than clinical testing to determine to what degree and what use the residual hearing is being put.

There are so many supplementary causes of deafness, such as general health, which can include poor nutrition, poor clothing, susceptibility to colds and catarrh, home conditions, insecurity in the family, atmosphere in the home life of the child, mental outlook, frustration, introversion and many other hidden causes, which, combining with a genuine loss of hearing, affect different children in a variety of ways. Here in the special

class children have been encouraged to "come out of their shells" or as an observer aptly described it "to blossom" in a bright and happy atmosphere, and thereby make it possible for the true cause of their handicap to be ascertained.



A partially deaf child, with hearing aid, taking part in an ordinary class of hearing children.

Four cases were diagnosed in this way, and after a short period, during which they were given individual help with their basic lessons, they were returned to their own schools as being capable of taking part in normal class routine to the full extent of their mental ability.



Reading lesson using hearing aid.

It was also discovered that one of the boys and one of the girls in the class had a peculiar "word deafness," and whilst hearing the sounds, and being able to reproduce the words perfectly, could not make sense of a large proportion of their meanings, so that much of their previous aural education had been void.

Another girl was found to possess a kind of "letter blindness" where individual letters of the alphabet were indecipherable to her, and all her reading ability based on memory of known words alone.

A boy, who was making no headway with the school work based on his chronological age, has shown considerable promise now that he has been given exercises more suited to his mental age.

These idiosyncrasies, and others, would remain unnoticed or misunderstood while the children were units of a large class. They would, of necessity, have developed unchecked to the ultimate disadvantage of the child in later life. Now there is every chance that they can be remedied.



Learning Lip-reading by mirror.

A girl of thirteen had received most of her education in a residential school for the deaf. She was inclined to be very nervous, easily frightened and upset, and at such times her hearing loss amounted to almost total deafness. She was with the class for ten months, was fitted out with a Medresco Hearing Aid, received treatment for her nervous complaint, and is now doing well in a Modern Secondary School and living a normal life in her own home.

Other cases now in the special class include a boy with severe high frequency deafness, who has been attending a Day School for the Deaf, and who had been previous to this in a Residential Deaf School. His mother reports that his general health is considerably improved. He has been with the class for three months.

A girl, who has spent much of her early childhood in hospital, is now making up for time lost. She feels no embarrassment in having to begin again with very elementary work, as in this class she says she does not feel that the other children are watching her, and she also gets help from her older sister at home.

A girl, aged nine, recently admitted, has lost her hearing completely following T.B. meningitis. Her guardians begged that she should not be taken away from home again. She is one of the few who have recovered from this complaint and her progress is therefore of particular medical interest.

A boy, aged ten, comes a considerable distance from home each day by himself. He has a Medresco Hearing Aid and his parents report that he is a changed boy and very happy.

The other children in the class have similar histories. Their handicap is not wholly deafness, although their case sheets show them to have considerable hearing losses. They have lost confidence in themselves. They did not believe themselves capable of many of the things other children could do, and in some degree they were unhappy. Now they find things changed. They have opportunities denied them previously, and as a result they have furnished two separate exhibitions of their work during the year; work they have been proud to have shown to the public. They have given demonstrations of agility and balance, and produced a Nativity Play, which one of the visiting City Councillors described as being comparable with the best he had seen in normal schools.



Exercise for balance.

Apart from basic school work the children are encouraged in home crafts, personal cleanliness and smartness. In the summer they were able to visit the country and seaside for their lessons. They travelled in a shooting brake, which is fitted with an amplifier so that they can be kept well informed of items of special interest during the journey. The brake is owned and driven by their teacher. This year they went to Worsley, Barton, Dunham, the Mersey Tunnel and New Brighton, as well as making frequent visits to nearby parks for nature study and the collection of specimens for their "museum."

To summarise the work of the special class would be to describe it as a diagnostic aid, a restorative of self-confidence and happiness, and a necessary link between the school and home life of handicapped children.

Parents' Club (Parents of Handicapped Children).

At the beginning of 1949 the Parents' Club Committee decided to hold regular monthly meetings of the Parents' Club at Police Street Clinic, Pendleton, and during the year this programme, with only one or two exceptions, was adhered to.

The March meeting was addressed by Mr. H. L. Latham, Health Education Officer, who explained sections of the National Health Service Act.

During April, at the parents' request, a film show was arranged. The films were loaned by the Central Office of Information and were "Your Children and You" and "Your Children's Sleep."

Helpful advice on the finding of suitable jobs for handicapped children was given by Mr. Barnes, of the Ministry of Labour, when he addressed the members at their next meeting. Miss B. Chadwick, the Health Department Almoner, also spoke informally of her daily duties.

At the beginning of June a motor coach run into Cheshire was arranged for the children and any interested parents, this was followed by tea and games at Buile Hill Park Café, where the children were welcomed by the Mayor and Mayoress, Councillor and Mrs. C. R. V. Haynes.

The subject of Mrs. W. Edge's talk, in July, was "Guiding and Post-Guiding for Handicapped Children," and Nurse Booth, of the Eye Clinic, made her contribution on "Your Children's Eyes."

Meetings during the summer months were cancelled, but in October a joint meeting with members of the Mothers' Clubs (Maternity and Child Welfare and Day Nurseries) was held in the Education Office Assembly Room, Chapel Street, and a demonstration of baby gymnastics was given by Mrs. Estrid Dane, the Neumann Neurode worker. Films were also shown at this meeting, and songs were given by the Pendleton Welsh Ladies' Choir. His Worship the Mayor presided on this occasion, and also at the November meeting when Professor and Mrs. A. W. G. Ewing gave advice on "The Education of the Deaf Child." Miss Molly Sifton, who was born deaf, but with the help of special education learned to speak and take part in the normal affairs of everyday life, also spoke during this evening, and gave great encouragement and hope to the parents.

Messrs. Dobson and Young, the radio artistes, provided musical entertainment at the meeting in December, which was again held in the Education Office Assembly Room.

The children's second Christmas Party which took place at the Art Gallery, with the kind permission of the Mayor, was, if possible, more successful than last year's. Over 300 children, with varying handicaps (deafness, epilepsy, crippling conditions, diabetes, asthma, etc.) were invited, and the mothers of those who needed constant parental care were asked to stay. The entertainment included dancing and miming by young members of a school of dancing, and diversion by a ventriloquist, conjurer and juggler. The Salford City Police Band, conducted by Mr. J. E. Needham, provided the music for carols and community singing. The Christmas tree was illuminated, and after tea each child received a gift, a bag of nuts and fruit, a paper hat, a bag of sweets and a balloon—presented by Father Christmas.

The "Home Observation" Scheme.

The School Health Service, with its efficient routine inspections, rapid surveys and special lists, provides effective "screening" covering in some aspect or other every school child in Salford, including under five's at nursery schools. Continuous effort is made to discover and to bridge any gaps in the "screen," and to ensure that every child, without discrimination, has available to him the highest possible standard of treatment the service can provide.

In the case of some of the more serious defects such as epilepsy, asthma, heart disease, etc., it was felt that there was some possibility that a child might suffer in health from the delay imposed by the intervals of weeks and sometimes months between examinations.

The " Home Observation " scheme was prepared with the object of providing the medical officer with a complete and reliable day to day (and night) case history—giving the incidence of " fits," asthma attacks, heart attacks, etc., the actual date, time and duration of each occasion, also other information bearing on the case. Obviously, such detailed information must prove of considerable value when it is compared with " hazy " recollections. A complete picture of the child's response to treatment would be presented.

The successful operation of the scheme depends in the main upon the co-operation of the parents in keeping a reliable record. The entries to be made on the record card provided have been made as simple as possible, and full instruction and every assistance would be given to the parent. In the case of an illiterate parent another member of the household would be instructed.

Ideally, the scheme would be supervised by a health visitor, but because of the present shortage of nursing staff the work has been started in a small way by other personnel of the School Health Department.

A watchful eye would be kept on each case by the health visitor, and at the end of each month the home would be visited. The entries made on the card should be carefully revised in the presence of the parent, so that this information, together with the health visitor's own report, should provide a very valuable guide to the medical officer. The completed card would be returned to the department and attached to the case cards for the perusal of the medical officer. The health visitor would replace the card with a new one each month.

The following notes give brief case histories of children whose parents are at present co-operating in the " home observation " scheme :—

F.J.H. (Asthma). Asthma attacks for past three years. Usually follow excitement and colds. Admitted open air school in August, 1949. Recommended breathing exercises. Still having regular attacks of asthma, however ; parents and boy discouraged by apparent unimprovement in condition. Mother eager to record day-to-day changes in boy's progress.

J.D. (?Epilepsy). History of recurrent attacks of fainting—seven in the last eight months, ?epileptic attacks.

S.H. (Migraine). Complained of intermittent headaches for several years. Quite well during the intervals. Examined by neurologist and treatment recommended. Attended open air school for eighteen months. Seen regularly by own doctor. Recently having headaches three to four times weekly. Further treatment prescribed.

Spastic Class.

The outstanding feature of this year has been the change-over from half-day to full-time school and the development of a wider curriculum which this has made possible. Some attempt has been made to enrich the impoverished experience of these children. In addition to the tool subjects, Music (taken by the Nursery Assistant, Mrs. Townsend) ; English, History, Geography, Art, Handwork and Nature-Study have been taken.

The following stories have been enjoyed :—

" Water Babies," " Hereward the Wake," " Just So Stories " and " Black Beauty." Simple language exercises have been taken. Letter-writing has been an occasional class activity, when opportunity has arisen, e.g., the absence of a member of the class.

A News Sheet of current events has been compiled. More handwork has been undertaken—some in connection with other lessons and some for the Hospital School Exhibition and Sale of Work on November 22nd, when some of the art work was also exhibited.

The favourable summer gave opportunities for work out-of-doors and for a closer study of the hospital grounds, which formed the basis of the Nature-Study lessons.

The change-over to full-time school has accentuated the space limitations of the classroom, particularly the lack of opportunity to stimulate the younger members of the class to be more venturesome through activities suited to their age level.

INDIVIDUAL REPORTS.

H.H. (Spastic Diplegia). This boy has learned to manipulate large numerals (plastic door numbers) and to work out simple sums. Little progress has been made with writing but his reading and speech are improving. He is able to give oral responses to questions. He is now more proficient at handwork and art and has made a doyley case, diary cover and hot water bottle cover, using thonging method. During the year he has shown considerable educational and physical progress. He is looking forward with pleasure to the arrival of a self-manipulated wheel-chair.

G.H. (Hemiplegia). G. has made good progress, not only in educational attainments but in the approach to new work. She is a very helpful member of the class. Her reading difficulty is decreasing and her English now shows promise.

R.E. (Spastic Diplegia). Progress has been steady but not rapid. He still has no number concept but can add without the aid of counters. With practice he should become an adequate, if not a good reader. Is very enthusiastic about writing. Uses graded writing cards and keeps them in order by himself. In contrast to his attitude towards other work, he never needs urging on. His handwork is neat but he is unable to thread his own needles. He appeared to have sight difficulty at the beginning of the year. His eyes have been retested, and new spectacles are awaited. Attention span, though short, is lengthening, and he has learned to work on his own. His progress is erratic—he cannot carry a message accurately and has not sense of time.

M.P. (Spastic Diplegia). Towards the end of the year M. began, at last, to show a little progress in numbers and reading. She can now count accurately and add and subtract tens and units. She uses a tracing method for writing, and this has produced a more promising result than previously tried methods—possibly this minimises directional difficulty. M.'s out-of-school life is pathetically restricted, as was revealed when teacher asked: "Have you ever been inside a sweet shop?" and received the answer: "No! but I've looked in the window."

S.A. (Athetosis). This little girl had a serious illness at the beginning of the year, which caused a temporary setback. She has learned to count accurately up to 10, and to add and subtract. Her lack of speech is a great problem, for one fears to go too quickly. She can recognise her own name and spell it, using magnetic letters. She is able to match pictures and words and picture cards of relevant subjects. Although she can hold a pencil and scribble, she has not yet enough control to enable her to write. Manual dexterity of the right hand has greatly increased. She can now stand up at will.

A.H. (Athetosis). During the first half of the year educational progress was disappointing and impeded by unsatisfactory home conditions. Progress lately, however, has been considerable. His movements have become more controlled, and his attitude has become constructive instead of destructive. He can write most letters, but no words other than his name.

R.B. (Hemiplegia). This boy works well and ably. A very profitable year. Rapidly approaching normal educational level for his age, thereby making up for time lost consequent upon his accident.

W.S. (Hemiplegia). During the past year W. has been an in-patient at Salford Royal and Hope Hospitals, and has lost much of his schooling because of the necessity to attend for physiotherapy. His English and reading is poor and uncertain. He enjoys his hand-work and art lessons, however, and never allows his handicap to get in the way.

Open-Air Schools.

In 1946 the open-air school at Frederick Road was so badly damaged during the floods that it had to be closed permanently. Since then the other open-air school at Barr Hill on Bolton Road has provided the total accommodation in Salford for delicate children whose health would suffer if they were compelled to attend the ordinary school. Barr Hill can cater for 100 children so the total accommodation is at present very inadequate, and will remain so until the completion of the new Claremont open-air school. A second school may help solve the present teaching difficulties caused by the wide age range of these children.

METHOD OF SELECTION.

The children are referred by parents, teachers, school attendance officers, medical practitioners and the school medical staff, regarding their suitability for a stay in the open-air school. They are all examined by the Assistant School Medical Officer whose special duty it is to attend the open-air school at least once each week. No child is admitted whose condition is likely to make it a source of infection to others.

A School Nurse visits the school daily for the general medical supervision of the children and to treat minor ailments. Nurse also weighs a small number of children at each visit so that each child's weight is recorded every third week.

The Physiotherapist attends the school on one day each week and is chiefly concerned with remedial exercises for posture or asthma.

Since 31st January, 1949, a special bus has been provided for the children attending this school. Parents who wish their children to travel to the school on the special bus arrange for them to be at one of the stopping-places at a pre-arranged time.

The children have breakfast, dinner and tea at school. There is a rest period of one hour after dinner, from 1 p.m., when the children sleep on small portable camp-beds.

During 1949, 74 children were fit to transfer to ordinary schools. A further seven reached school-leaving age.

	<i>Boys.</i>	<i>Girls.</i>
Average stay in the school.....	49 weeks.	56·5 weeks.
Average increase in weight	6·9 lbs.	9·9 lbs.
Average age on entry	9 years.	9·8 years.

At the time of admission to the school, most of these children are suffering from malnutrition or anæmia.

Report on the Child Guidance Clinic.

Dr. Muriel Hughes reports :—

The demands upon the Child Guidance Clinic are always numerous and many of them urgent. The problems with which we deal are so intimately connected with family life and with matters which the majority of people are concerned to hide, such as friction between parents, that we are unable to discuss the character of our work in detail lest confidence in our understanding and discretion be disturbed.

We have dealt in 1949 with some 220 patients, 150 of whom have had the full psychiatric investigation. The total number of interviews in the Clinic was over 2,500, and home and school visits over 300. This is a large number for a staff which includes only one Psychiatric Social Worker. A number of patients were already under treatment at the beginning of the year, and in all 114 children have received treatment, some of them throughout the whole year. The length of treatment varies in accordance with the severity and resistance of the maladjustment, and may last for eighteen months or thereabouts or for much shorter periods. An analysis of our figures shows that the type of problem with which we deal covers a wide range. It is not uncommon to find that the reason for referral is only one outward visible sign of a complicated series of symptoms. Enuresis seems to be the most common complaint, but is often revealed as only one of many difficulties, such as failure in school, timidity, aggressivity, or inability to make friends. Only a small proportion of our patients are referred for anti-social conduct, and we are at pains to keep our waiting list within reasonable proportions by discussion of possible referrals with the Probation and Children's Welfare Departments.

The Clinic serves a very interested cross-section of the community, many of whom value it highly. In addition, the Child Guidance Clinic affords opportunities both for study and practice to students in training from two Northern Universities. These students are post-graduate students, teachers, Psychiatric Social Workers and Children's Officers. The Clinic staff has always been willing to talk about its work to interested bodies.

Report on Physical Education.

(Submitted by the Organisers of Physical Education).

It has long been held that the purpose of education is to provide a sound training of body, character and mind. Physical education properly conceived is more than a mere training of the body. It envisages bodily fitness in terms of stamina, speed, strength, agility and graceful movement; mental fitness in terms of a well-balanced mind and nervous system; character training in expression of individuality, fair play and co-operation with others, and all of these springing from enjoyment and dexterity to be found in physical activities and sports, which are now as never before, the right of every child. With these points in mind it can be claimed that progress can be reported in all branches of the Physical Education programme in the Schools and Youth Clubs of the City.

The work is reviewed under the following headings:—

- (a) Physical training, including equipment and clothing.
- (b) Organised games and out-of-school activities.
- (c) Dancing.
- (d) Swimming.
- (e) Teachers' classes.
- (f) Work in Youth Clubs.

PHYSICAL TRAINING.

This branch of the work goes on unobtrusively and continues to show progress. Until more gymnasia and indoor accommodation becomes available it is inevitable, however, that progress in certain branches of the work will be restricted. This is particularly so for the 15 year age group where the type of work most suitable for these children demands indoor accommodation and portable apparatus.

Portable apparatus suitable for the senior children has been introduced into more all-age group schools, but there is difficulty in supplying this not only because of the very high cost but also because of the tremendous time lag in delivery—in some instances as long as 18 months. More apparatus has already been ordered and it is hoped will be delivered during 1950.

The position for the Infant and Junior Schools is better than that of the All-Standard and Senior Schools. Here a large proportion of these Departments are tackling the subject with the more modern methods and the very free approach which is at present advocated. A percentage of these schools have been supplied with large portable junior or infant apparatus, and in several instances schools have most successfully improvised their own. The versatility of movement, the sense of achievement and the obvious enjoyment, apart from the very vigorous activity which these children get when using this apparatus must be seen to be believed.

An allocation of soft shoes for physical education was made to all departments in the City, with the exception of infants' departments, for whom provision is made during 1950.

The shortage of suitable women teachers for girls' work continues.

ORGANISED GAMES.

Full use is made of all available playing space within the City boundary by the schools in the City, both in and out of school hours. The organised games period is included in the time-table of all schools from the junior departments upwards, and this form of physical activity has developed further during the past twelve months.

There are not yet sufficient grass covered playing areas to allow all children a weekly visit for games. There is also a shortage of grounds on which hockey can be played, and this is affecting the girls' games particularly since with the advent of the extra year at school many more schools desire to make this their school game. In the past with the exception of the Grammar Secondary Schools the main girls' winter game was netball, which is played in the school yard.

Activities of the Salford Schools Sports Federation continue to show progress. During the year very full programmes were arranged and carried out, and large and enthusiastic groups of boys and girls might be seen most evenings and Saturday mornings actively engaged on some form of game or school sports. Tribute must be paid to the large band of enthusiastic teachers who give up so much of their free time to coaching and umpiring for these children, and without whose help these activities could not take place.

The various activities include football (association and rugby) and netball during the winter months, and cricket, athletics and swimming during the summer months. The standard of play in netball is markedly improved, possibly due to the various courses held, and the town team reached the semi-final in the Lancashire tournament. In addition one teacher sat for and passed her "A" Umpires Certificate at the beginning of 1949, and four teachers sat for the same examination in December 1949. The Salford representative was elected Vice-Chairman of the Lancashire Schools Netball League.

The athletics section organised three sports meetings, including one for the 14/15 age group, and the swimming section held two galas. Six new trophies were provided this year for the increased number of competitors due to the raising of the school age, the athletics section taking three and the cricket, association football and rugby football sections one each.

DANCING.

Dancing continues to form part of the curriculum in all Infants' Departments, and in the majority of departments in which there are any girls. English Country Dancing and National Dancing are taught as well as easy combinations of steps with which the children themselves can build up dances.

SWIMMING.

Good progress can again be reported in this branch of physical education. Some slight increase in bathing facilities became available at the beginning of the summer session, making this the first year since 1939 that all the plunges in the City were in use.

throughout the season. An increased attendance of children for instruction resulted, and this is reflected in the results of the examinations for the Education Committee's Swimming Certificates. In 1949, 480 children gained First Class Certificates by swimming 50 yards breast stroke and 50 yards back stroke. 893 children gained the Second Class Certificate by swimming 50 yards breast stroke and 1,164 children gained Third Class Certificates by swimming 25 yards breast stroke, making a grand total of 2,537 Certificates against the 2,193 awarded in 1948. In addition the Baths Committee awarded 1,164 free season tickets to children gaining a Certificate for the first time as against 811 awarded in 1948.

An innovation was the awarding of an Advanced (Schools) Swimming Certificate for Girls, designed to assure an all-round proficiency in the water for which candidates had to perform two types of dive, swim 75 yards breast stroke, 50 yards back stroke without arms, 25 yards front crawl, 25 yards back crawl, or double over arm English back stroke. 73 girls entered and in all cases completed the distances to be swum, but only 28 were successful in gaining the award, the examiners failing the remainder for faults in style. This has already made the children aware that a high standard of performance is expected and the enthusiasm and interest which it has stimulated, together with the increased facilities for the use of the Baths which it is hoped will materialise during the coming year, should enable more advanced swimming to be taught, and should result in an appreciable increase in the number of children taking and passing this award in 1950.

Good results were also achieved in the Royal Life Saving Society Examination with a total of 370 awards, which is an increase of 61 awards over 1948. The Salford Hundred Medals were competed for, and all the medals offered were gained, viz: eight to boys and four to girls. The swimming galas promoted by the Salford Schools Sports Federation and the Salford Baths Committee were keenly contested by a large number of competitors. Several schools also held their own swimming galas.

TRAINING OF TEACHERS.

Courses, classes and demonstration lessons have been carried out throughout the year with the object of raising the standard of work and bringing to the notice of teachers the new approach to physical education. A course of twelve sessions was held for emergency trained teachers (men) who had taken physical education as a subject only at "basic" level during their thirteen months period of training. Other courses were conducted on various aspects of physical education, games, dancing and umpiring.

WORK IN YOUTH CLUBS.

There has been a steady development during the past twelve months in all phases of physical activities. A new gymnasium for a Youth^o Club has come into being in the dockland area of Salford, providing facilities in a locality where it is much needed. An analysis shows that the most popular subjects are :—

- Athletics.
- Camping.
- Football (association and rugby).
- Hiking.
- Keep fit.
- Netball.
- Physical training.
- Swimming.
- Table tennis.

In addition, provision is also made for badminton, basketball, boxing, cycling, dancing (Country, National and Ballroom), tennis and weight-lifting.

Almoner's Report on Convalescent Treatment.

Most of our cases are referred to the Invalid Children's Aid Association and are dealt with in a very satisfactory manner.

I strongly hold the opinion that an extension of the Country School or Holiday Camp idea is even more needed than further Convalescent Homes.

I find that children needing a holiday are frequently referred for convalescence—what they really need is a holiday to keep them well or to prevent them from falling sick, rather than convalescence which I feel should be provided promptly at the end of a definite illness.

It is often found that a mother, when asked what a child has suffered from, has to think very hard to rake up some reason for convalescence. This, when done in the presence of the child, makes him feel that he is only interesting when ill. Surely it would be better to have the joyful anticipation of a holiday for which he does not need to pretend to be ill. I really feel that one week's holiday—together with the anticipation of it and the joy of talking about a really good time on his return is likely to do a child who is run-down quite as much good as a month at a Convalescent Home.

Salford Poor Children's Holiday Camp—Prestatyn.

During the year, 1,088 children derived benefit from a stay at this camp, which is pleasantly situated and close to the sea. The children, as in previous years, were in the charge of Salford teachers, except for two groups of handicapped children who were accompanied by members of the nursing staff of the Health Department.

The excellent facilities afforded by the camp are enjoyed to the utmost by these children who otherwise would have no annual holiday.

Audiometric Survey.

During 1949 the audiometric section of the School Health Service again made its important contribution to the preventive work of the service. The hearing of the eight and nine year old school population was tested by the most modern methods available—using the recently developed Western Electric Group Speech Audiometer and Amplivox's latest Individual Audiometer, both of which are electrically driven.

Unfortunately, not all schools are in a position to offer suitable group testing accommodation (and, indeed, most schools are noisier than the ordinary listener would think) but any reported case of suspected deafness in these schools is individually tested on clinic premises.

Groups of twenty children are tested with the *Speech Audiometer*, which is a specially constructed gramophone. A record of a speaking voice calling out single digits at decreasing intensity is played, and the children undergoing the test are asked to write down the numbers they hear on the forms provided. Each ear is tested separately. Children who fail to reach the required level of hearing are retested to narrow down the chances of the failure being caused by non-aural conditions. If the second test gives an unsatisfactory result, the child is referred for an individual test. Wax in the ears is removed, if necessary, at the nearest clinic.

The *Individual Audiometer* uses a number of pure tones of various frequencies to produce a finer, more dependable test. The child who still shows a "below-average" hearing loss after the individual test is invited to the Ear, Nose and Throat Consultant for further investigation. This may take the form of treatment for discharging ears,

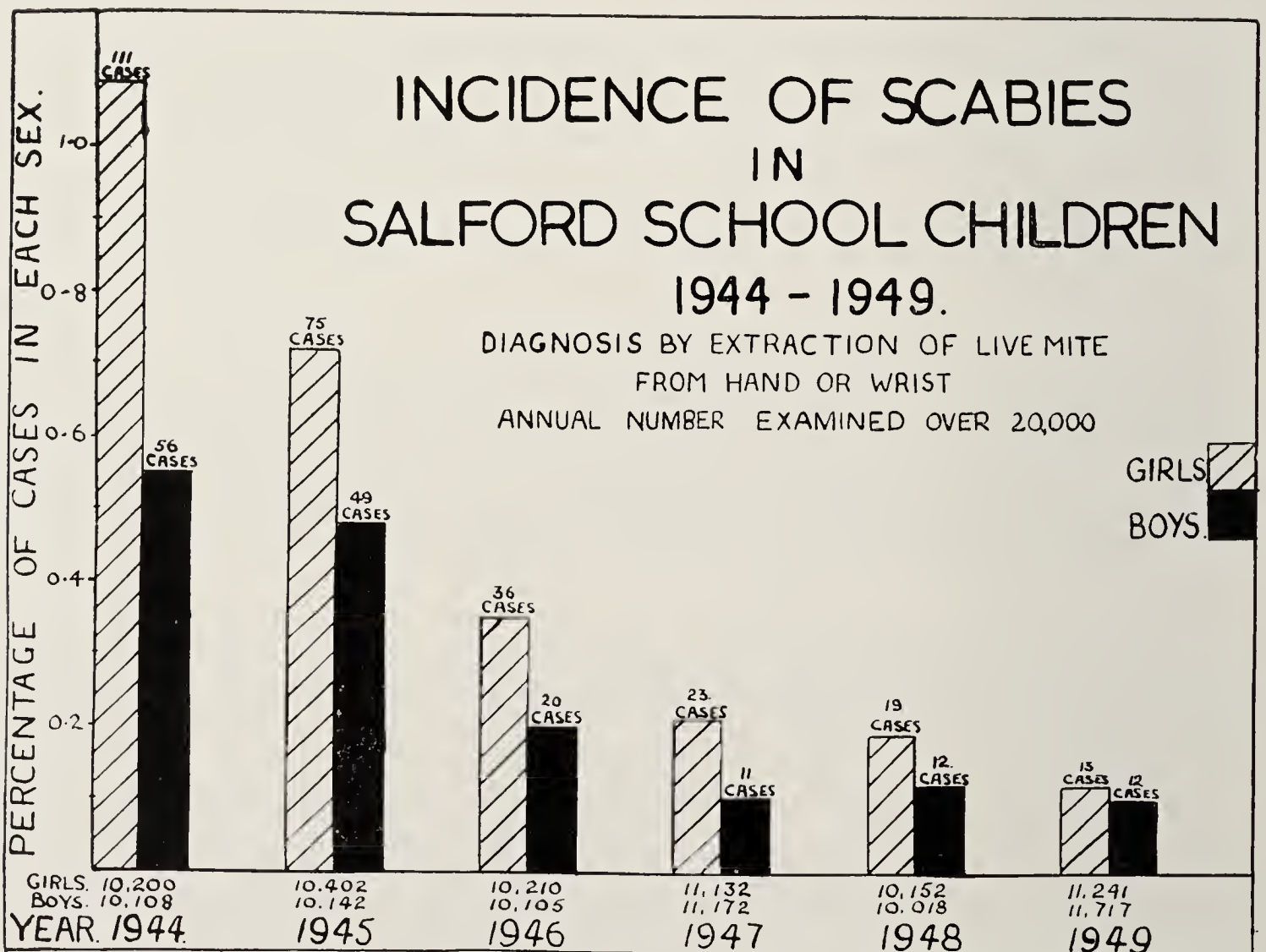
referral for lipreading tuition or admittance to the special class for partially deaf children, approval for tonsils and adenoids operation, advice to sit in the front of the class near the teacher, or, perhaps, several weeks' observation followed by a "check" hearing test.

The value of routine testing of children's hearing is shown in many ways—the gratitude of the parent whose child's deafness was previously undetected and mistaken for dullness; the boy who was discovered never to have had treatment for his chronic discharging ears which cleared up completely after regular care.

Scabies Survey.

The annual examination of Salford school children was carried out during the 1949 autumn term by a trained worker. The procedure adopted was for the children to file past whilst he sat in the best possible light, preferably near a window, the actual examination of their hands taking approximately fifteen seconds per child. In cases where suspicions were aroused, a watchmaker's lens was used to aid inspection and diagnosis was confirmed by the removal of a live sarcoptes.

A total of 22,958 children were examined in this way and only 25 positive cases of scabies were diagnosed—an incidence of 0·11 per cent. The number of boys was 11,717 (twelve cases with an incidence of 0·1 per cent.) and the girls 11,241 (thirteen cases with an incidence of 0·12 per cent.).



The percentage with scabies in schools, according to social grouping of schools, was as follows:—

	Per cent.
Good schools	0·0
Average schools	0·1
Poor schools	0·1

The number of treatments given to school children during the year 1949 was 132.

Scabies Diagnosis.

It has proved to be a great advantage in dealing with cases of scabies to be able to find and isolate the causative mite. There can be no doubt whatsoever about the diagnosis once the parasite has been discovered. Unfortunately, as in the recent outbreak of scabies at "The Homestead," when this precaution is omitted scabies can be overlooked and masked by severe secondary infection.

First of all it is necessary to know what to look for, and the first essential is to find an inhabited burrow and by careful scrutiny to ascertain the position of the parasite. The simplest method of extraction is to take an ordinary needle mounted in a wooden handle and reflex the skin covering the mite. By careful manipulation the parasite can be extracted as it will adhere to the needle. This process can be done with the naked eye, but the aid of a watchmaker's lens gives a very helpful magnification and leaves the hands free to operate. The mite can then be placed on a clean slide and be examined under a microscope.

Once a patient has seen the living scabies mite walk across the slide in its characteristic manner it becomes an easy matter to secure their full co-operation in ensuring thorough treatment.

Nutritional Survey.

A survey was carried out on ten year old school boys by Dr. Berry and Dr. Cowin of the Ministry of Health. The total number of boys examined was 200.

Heights and weights were recorded. Muscle tone, questions regarding diet, measurements of fat by callipers, hæmoglobin estimation and dynamometer tests (which measure strength of pull) were some of the particulars obtained.

Two boys were found to have exceptionally low hæmoglobin levels, 47 per cent. and 51 per cent. respectively. The boy with 47 per cent. had been medically examined in school only a fortnight previously and showed no visible signs of his condition, but no blood test was taken on that occasion and so the low hæmoglobin level was not discovered.

This shows the importance of this type of survey in bringing to light unsuspected deficiencies and the use of specialised tests of this kind are a further step in the improvement of the health of the school child.

The overall nutritional standard of the Salford boys compares favourably with boys in Tottenham and Kingston, but they are lighter and shorter, and show rather poorer hæmoglobin estimations. The Salford results of the tests on the dynamometer are as good as the performances put up by boys in Kingston schools.

Report on School Nursing carried out by Health Visitors/School Nurses.

(not including the work of full-time school nurses).

Several changes have taken place in the organisation of the School Nursing Service during the year, following the retirement on superannuation of the Superintendent School Nurse at the end of 1948, and the retirement of three school nurses in 1949.

By the end of the year, 44 primary, junior and senior schools, in addition to six nursery schools and five nursery classes, were being supervised by the Health Visiting Staff. Groups of not more than four schools each are allocated to Health Visitors already working on areas in the vicinity of the schools concerned. They are thus able, in many

cases, to continue the health supervision of children known to them since infancy ; in other cases mothers of children may be known to the Health Visitor through her contact with children in the family who are under school age, which greatly facilitates any follow up work involving home visiting. This may be illustrated by an instance where a Health Visitor, having taken over a school for the first time, was concerned about the verminous infestation of two small sisters. Consultations with the teacher elicited the fact that the girls, although cleansed from time to time by a Hygiene Attendant, were frequently re-infested. A home visit was paid, ostensibly to the baby, and the subject of infestation of the school children was broached after an examination of the toddler who, too, was infested. The Health Visitor knew the mother well enough to suggest that an adult member of the family might be the source of infestation and the mother eventually admitted that she herself was the source. This question of verminous infestation of adults is one which requires very delicate handling. To a School Nurse who was a comparative stranger, this mother would never have made that admission, and would have been highly indignant if a suggestion that her own hair be examined had been made. As the problem of infestation is a family one, and the examination of adults entirely voluntary, the task of the School Nurse is not easy, particularly if she is unknown to the mother.

Particulars regarding the frequency and degree of infestation of children in schools during 1949, where Health Visitors have undertaken school nursing for over three years, are given below.

Four Health Visitors who examined 3,896 children in 11 schools, found that the percentage of individual children infested at any period was 10·6 per cent. Of these, 6·7 per cent. were infested once only (six per cent. " B " and 0·7 per cent. " C "), 2·5 per cent. were infested twice (2·3 per cent. " B " and 0·2 per cent. " C "), and 1·2 per cent. were infested three times (1·1 per cent. " B " and 0·1 per cent. " C ").

Nursery Schools in the City are visited daily, if possible, by a Health Visitor and Nursery Classes are visited monthly. The rate of infestation of these children is comparatively high, and is influenced a good deal by the zeal or otherwise of the Nursery Assistants who are responsible for the cleansing of the children.

Particulars of infestation are given below. The Nursery Classes are attached to schools not yet taken over entirely by Health Visitors.

	Children attending.	Percentage of individual children infested.
<i>Nursery Schools—</i>		
6	231	22·9
<i>Nursery Classes—</i>		
5	372	22·3

The mothers of these children nearly all go out to work, so that home visits are fruitless. The mothers are often seen by the staff of the nurseries and their attention drawn to the children's condition.

HOME VISITS to children over five years of age in respect of verminous infestation totalled 78. Many more mothers were seen and advised at clinics and during school inspections.

Other work carried out by Health Visitors in schools includes :—

(a) VISION TESTING.

Number of sessions 68 ; children tested 2,333.

(b) SPECIAL WEIGHING AND MEASURING OF CHILDREN.

Number of sessions 13 ; children weighed and measured 319,

(c) SPECIAL VISITS TO SCHOOLS.

Number of visits to schools 204 ; children seen 538. (These visits followed notification of infectious disease or were visits to school regarding individual children).

(d) ASSISTING MEDICAL OFFICERS AT SCHOOL INSPECTIONS, INCLUDING NURSERY SCHOOLS.

Number of sessions 361 ; children examined 5,725.

(e) RAPID SURVEYS.

Number of sessions 248 ; children examined 11,435.

It is hoped in future to conduct a " rapid survey " of all children at least once each year. The object of the survey is to discover those children who need observation or who need full medical investigation at a clinic. All children are stripped to the waist, the skin, feet, ears and eyes are examined—the latter tested if necessary—any evidence of subnormal health, lassitude, malnutrition or malposture is noted and appropriate children referred for medical examination. Adequacy and serviceability of clothing and footwear are noted and a general cleanliness and head inspection is conducted as part of the survey.

Total sessions and visits to schools by Health Visitors 2,035, including visits to Nursery Schools and Classes.

Total number of examinations made 47,811.

The standard of cleanliness, including verminous infestation of school children, varies according to the situation of the school and is generally speaking only fair. It is hoped in 1950 to devote more time to the follow-up, in homes and schools, of unsatisfactory children.

Teaching of Hygiene and Mothercraft in Schools.

The Health Visitor who took over certain schools in Trinity Ward for the first time in September was asked by the Head Teachers to give talks to senior girls. A syllabus of lessons was not prepared as the subject for the talks arose mainly from findings at the Rapid Survey.

Subjects dealt with were :—

1. Care of teeth.
2. Care of the feet.
3. Posture (with film strip).
4. Care of the skin and hair.

In each case the necessary elementary physiology was explained and the preventable defects and disorders were mentioned, but the main emphasis was laid on the habits which maintain health. The Head Teacher was present on each occasion. Practical demonstrations were given where appropriate.

There is a great need for health talks in schools, as many children coming from poor homes have a very low standard of hygiene. Talks by the Health Visitor following her inspections would be very valuable in helping to raise the standard of cleanliness and in helping to inculcate healthy habits.

Sanitary Conditions in Schools

(submitted by Mr. J. C. Starkey, Deputy-Chief Sanitary Inspector).

Somehow the old school has established itself in our minds as being beyond reproach. This is probably because our early training was in the days when respect was the rule and not the exception. In any case the days are never quite as good as they used to be. It is a fact, however, that sanitary conditions in most schools of the last century are even worse than in dwelling-houses of the same period. Thus the formative mind progresses from bad to worse.

The child who is used to an old-fashioned water closet at home may encounter a trough closet at school, the cold water tap over the scullery sink may be replaced by a stand pipe in the school yard and the all-purpose metal wash basin used in the home may be replaced by nothing at all. This is no exaggeration ; it is a lamentable fact of modern times in many of our old schools throughout the country. One may carry this comparison of ills even further : a clean working-class home for a dirty classroom ; room to breathe for a mass of hot bodies and foul breath ; the stimulating warmth of the fireside for the cooked and cooped-up heat of the classroom with a trickle of cold air for those near the door. All this to be endured on a piece of bread or a few cornflakes for breakfast. The school meals have been a godsend and I say " God bless 'em and those who fought for them."



It is strange that such a state of affairs should have persisted for so long with a wealth of legislation to enforce better conditions. Indeed the Sanitary Authority has an equal, if not greater obligation to the school than to the home or workshop.

Trough closets have been replaced by decent sanitary conveniences, washing facilities have been provided, classrooms redecorated, yards paved and heating and ventilation improved in our older schools, which must continue to function for many years to come. The best has been made of the present circumstances, unsatisfactory though they are in the older schools.

An excellent decision of the Education Committee was, in conjunction with the Health Committee, to appoint a Food Inspector to examine all food supplies and to keep a watchful eye on conditions in the kitchens. There have been no outbreaks of food poisoning

as in earlier years and I feel that it is in some measure due to the better hygienic control in the school kitchens. The routine checking of contracts has also revealed some startling shortcomings, which taken over the whole year prove that the appointment of a Food Inspector for this purpose was a sound investment.

From these remarks on sanitary conditions in schools it will be seen that the "child in the midst" needs us all and whilst in this article prominence has been given to the work of the sanitary inspector, the doctor, the nurse, the cook and a host of other workers are all necessary to supplement the work of the teacher, whose pre-eminence in this sphere is undisputed.

Physiotherapy Department.

I am pleased to report that 1949 on the whole has been a very happy and successful year. The staff position, though still difficult, has been better than any year since 1939. There has been enough work during the year to employ two full-time physiotherapists, but as the present establishment provides for only one full-time worker, the treatment of certain children has been unavoidably neglected. As the accommodation at all the clinics is extremely limited, not permitting more than twelve children to receive treatment at the same time, and as the length of time for which a child requires treatment is anything from three to six months, it should be realised that at present there is little hope of many children receiving physiotherapy without having their name on the waiting list for a very long time, which is an unsatisfactory state of affairs.

SUNLIGHT TREATMENT.

The three sunlight clinics have worked continuously throughout the year. There have been no major break-downs in the apparatus and there has always been sufficient staff to work the clinics. Older children attending secondary schools have received treatment after school hours or on Saturday morning, so there has been no excuse for any child not to attend regularly. It is gratifying to report that there is now no long waiting list for sunlight treatment, and cases referred from a School Medical Officer are sure of receiving an invitation during the following two weeks.

ORTHOPAEDIC CLINICS.

Mr. D. D. Cranna, F.R.C.S., succeeding Mr. W. Sayle Creer, F.R.C.S., commenced duty in April, 1949. At Mr. Cranna's suggestion, a representative from a surgical appliance makers has attended the Orthopaedic Clinic every week, measured children for appliances, and discussed difficulties with Mr. Cranna. Shoes requiring surgical alteration were collected at the clinic and brought back the following week so that no child was kept waiting for altered shoes more than a week, which was a great improvement on the length of time taken previously.

Due to the shortage of hospital beds there is still a considerable waiting list for admission to Hope Hospital. In fairness to the hospital authorities it must be admitted that parents could co-operate far more fully in this matter. Frequently parents who have previously agreed to the necessity of an operation fail to bring their child when an invitation is sent and do not inform the hospital of their intention to default, so that for one week a hospital bed remains empty and a child who requires treatment is kept waiting a week longer than necessary. To try and obtain some satisfaction a letter is then sent to the defaulting parent asking if they wish their child's name to remain on the waiting list. In some cases even this fails to bring forth a reply and on the paying of a special visit to the parents usually little satisfaction is obtained.

SPECIAL SCHOOLS.

It has been the aim throughout the year to attend the Open Air School once a week. This school has proved the greatest difficulty from an administrative point of view. There is a great lack of accommodation at the school. During the fine, warm summer it was possible to hold classes outside on the grass, but during a cold, damp winter this is impossible. The late start of the school in the mornings, the times spent on meals and the rest period, make it difficult to work out a satisfactory timetable, and even when the members of a remedial class appear to be collected together, several may suddenly be whisked away for weighing or a special wireless session. It is impossible to give individual treatment at school, for conditions such as poliomyelitis, as there is no suitable place for undressing the children, or giving electrical treatment.

HOPE HOSPITAL SPECIAL SCHOOL.

In spite of a very small, badly ventilated room and no apparatus, most willing co-operation has been given by the teaching staff and the children, and it has been a continuous pleasure throughout the year to work in this school. The children look forward to the exercise periods and try at home to re-educate their affected limbs. In the near future when the school moves to Cleveland House, there will be far greater opportunities for remedial work, and it is hoped that further progress will be made.

BREATHING EXERCISES.

All children receive post-operative breathing exercises after Tonsil and Adenoid operations. These are given for a period of six weeks during which re-education is given in handkerchief drill, nasal breathing and chest expansion exercises. Special breathing exercises for asthmatic children continue to be held at three clinics, but the majority of these children now attend the Open Air School and receive treatment there.

Health Education in Schools.

(Report by the Health Education Officer).

During 1949, on the invitation of the headmaster of one of our "mixed" schools, a short course of health lectures was held for the senior boys (13-15 years) of the school. The course followed one for the girls which had been conducted by the Superintendent Health Visitor. As a preliminary, a draft syllabus was discussed with the headmaster and mutually agreed upon, the parents of the boys were then circularised and individual written approval for the attendance of the boys was then obtained.

The course ran for some fourteen weeks, taking up a final lesson period one afternoon each week. The course was admittedly only in the nature of an experiment and consequently no set timetable or syllabus was adhered to, the talks rather tended to develop on the lines indicated during informal discussions and questions with the boys themselves. The scope of the talks ranged through very elementary anatomy and physiology to the care of the body and the conditions essential to health. Sex education developed naturally in its proper place in the course and developed along the lines of family life and parental responsibility. Importance was laid upon personal hygiene and its importance in everyday life. Other subjects included diet and nutrition, the causation, spread and control of infectious disease, simple and practical first aid and an outline of the Health and Public Health Services available to all.

Use was made of film strips and visual charts and the aim of the course primarily was to remove, as far as possible, the misconceptions and malinformation which was present in even the most informed of the children.

The most important feature of the course was the discussion and question period at the end of each talk, the interest and keenness displayed by the boys was a true indication that the talks were fulfilling a true need. Relations between the speaker and the boys was good and although the headmaster was invariably present during each period, his presence was not needed to keep order, but rather to join in the discussion and often to illustrate aptly the importance and truth of some particular rule of hygiene, or law of anatomy, brought out in the discussion.

The true value of the course was to ascertain if the need for such instruction existed ; to gauge the reaction of an average class of boys ; and to work out in a practical way a commonsense syllabus to cover adequately, though simply, the subjects chosen. Obviously, technical terms and names were not used but behind all the talks and discussions was the aim of stressing the need for the observance of commonsense rules of health and their importance in safeguarding our health for the future.

From the questions which arose it was obvious that most of the boys had either only the very vaguest or totally erroneous ideas of bodily functions. They were comparatively well versed in patent medicine "lore," undoubtedly from the very profuse advertisements to be met with in almost every newspaper or periodical, but had little or no conception of "positive health" or of endeavouring to safeguard their own health or physique by their own efforts.

I feel that there is need for Health Education in its many forms to take its true place in the everyday curriculum of every type of school, so that at no time in his school life is a child suddenly faced with it as a new and different subject, but rather tends to grow up constantly improving and extending his knowledge and practice of all the conditions and factors in any way related to the betterment of his own and the community's health. From the very earliest nursery and primary school "habit training" to the elementary biology and natural history work of the junior school on to human physiology and biology, growth, sex education, development, maintenance of health, and studies of the growth and development of community health services and present day health problems, are only natural steps to be mounted in the educational ladder. It is rather a pointer to the slow development of health education in the schools of the country when it is realised that by far the largest number of our children emerge from the rather sheltered school life hopelessly ignorant of much of the essential knowledge necessary for the maintenance of bodily health. That much of the illnesses and chronic sub-health of today would be prevented by a fuller development of health education teaching in all schools, is a statement that I know would bear all investigation.

Children of Problem Families.

Members of the staff of the School Health Service have for some time been concerned about the children of so-called "problem families." Poor home conditions and the low standard of parental care are invariably reflected in the health and education of these children.

Workers of the Family Service Units, who do a tremendous amount of good in the rehabilitation of this section of the community, report that one of the most noticeable features in the behaviour of the school age child is his frequent absence from school. When he does attend he is usually late, and often without his breakfast. One child, who was being escorted to school each day in an attempt to get him to form the habit of regular and punctual school attendance, never had breakfast prepared for him by his mother. She was always in bed when the F.S.U. worker called for the boy.

The apparent dullness of many of these children is not to be wondered at when the family sleeping conditions are revealed. Parents and children often sleep together in the same bed. In one case three, and in another four, children were found sharing their parents' bed. In nine families (involving thirty children) of twenty under review, the parents sleep in the same room as the children. Two of these families sleep and live in one room. Rest, in such circumstances, must be of the poorest quality, and the cause of daytime sluggishness and inattention on the part of the child.

The mentality of these children, on the whole, compares favourably with their environment—probably because they are encouraged, or obliged, to be independent. They do not live in a stimulating atmosphere, but they develop self-reliance by making their own toys, inventing their own games, etc. There is no opportunity for home study, and usually not even a book to read in the house. No doubt it is this lack of provision in the home which leads to some of the children getting into trouble with the police. They find the wrong outlet for their creative energies. Such lack of parental guidance is deplorable.

These children are in the main, however, loved by their parents. Rarely does one come across a case of intentional physical cruelty. Neglect of the family is due more often than not to the mother's inability, through ill-health or over-work, to give individual children the attention they need.

Feeding is usually badly tackled. Parents remember to send their children to free school meals but somehow forget to give them the coppers if the school dinner is to be bought.

Most mothers who are entitled to vitamin supplements begin well by taking them regularly, but after a short time their collection becomes too much trouble and eventually is neglected completely.

Insufficient attention is paid to minor, and sometimes major, ailments of the children. Infested heads, sores, skin diseases, are put up with until treatment is absolutely imperative—and even then clinic attendance is haphazard. Discharging ears are often overlooked. Squint—which is caused by the greater incidence of infectious disease among these children—is not put right as quickly as it could be.

Seventeen children from these families were able to go to Prestatyn camp during the summer, and arrangements were made for a further twelve to be sent into private homes for a holiday. Not one complaint was received from their hosts.

The responsibility of educating these children in sound, healthy habits rests primarily with the parents who, themselves, must first be taught the principles of good living. It is the work of the Family Service Units to encourage such parents, often by valuable practical help, to develop a decent standard of home life. The natural and happy result of this will be the better care of the children.

STATISTICAL TABLES.

TABLE I.

Medical Inspection of Pupils Attending Maintained Primary and Secondary Schools.

A.—PERIODIC MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups—

Entrants	3,665
Second Age Group	2,517
Third Age Group	1,971
TOTAL	8,153

Number of other Periodic Inspections 1,018

GRAND TOTAL 9,171

B.—OTHER INSPECTIONS.

Number of Special Inspections 6,051

Number of Re-Inspections 13,522

TOTAL 19,573

C.—PUPILS FOUND TO REQUIRE TREATMENT.

NUMBER OF INDIVIDUAL PUPILS FOUND AT PERIODIC MEDICAL INSPECTION
TO REQUIRE TREATMENT

(excluding Dental Diseases and Infestation with Vermin).

Group. (1)	For defective vision (excluding squint). (2)	For any of the other conditions recorded in Table IIA. (3)	Total individual pupils. (4)
Entrants	52	705	735
Second Age Group	242	347	574
Third Age Group	170	256	406
TOTAL (prescribed groups) ...	464	1,308	1,715
Other Periodic Inspections ...	2	165	166
GRAND TOTAL	466	1,473	1,881

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR
ENDED 31ST DECEMBER, 1949.

Defect Code No.	Defect or Disease.	Periodic Inspections.		Special Inspections.	
		No. of Defects.		No. of Defects.	
		Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
	(1)	(2)	(3)	(4)	(5)
4.	Skin	121	199	522	30
5.	Eyes—				
	(a) Vision	466	37	113	8
	(b) Squint	99	155	45	3
	(c) Other	73	51	231	21
6.	Ears—				
	(a) Hearing	26	86	85	18
	(b) Otitis Media	134	152	861	26
	(c) Other	161	203	273	46
7.	Nose or Throat	287	1317	1,730	543
8.	Speech	37	117	64	20
9.	Cervical Glands	30	476	278	115
10.	Heart and Circulation	22	200	237	131
11.	Lungs	86	367	509	165
12.	Developmental—				
	(a) Hernia... ..	16	31	14	4
	(b) Other	10	50	8	12
13.	Orthopædic—				
	(a) Posture	107	292	175	77
	(b) Flat Foot	74	96	52	13
	(c) Other	181	202	169	46
14.	Nervous System—				
	(a) Epilepsy	5	18	19	5
	(b) Other	38	158	72	32
15.	Psychological—				
	(a) Development	6	30	38	7
	(b) Stability	10	36	132	99
16.	Other	147	176	2,057	533

B.—CLASSIFICATION OF THE GENERAL CONDITION OF PUPILS INSPECTED
DURING THE YEAR IN THE AGE GROUPS.

Age Groups.	No. of Pupils Inspected.	A. (Good).		B. (Fair).		C. (Poor).	
		No.	% of Col. 2.	No.	% of Col. 2.	No.	% of Col. 2.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Entrants	3,665	1 402	38%	2,043	56%	220	6%
Second Age Group	2,517	1,065	42%	1,295	52%	157	6%
Third Age Group	1,971	1,038	53%	866	44%	67	3%
Other Periodic Inspections	1,018	416	41%	545	53%	57	6%
TOTAL	9,171	3,921	43%	4,749	52%	501	5%

TABLE III.

TREATMENT TABLES.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS).

	No. of Defects treated, or under treatment during the year.
SKIN—	
Ringworm—Scalp—	
(i) X-ray Treatment	12
(ii) Other Treatment	7
Ringworm—Body	60
Scabies	117
Impetigo	141
Other Skin Diseases	756
Eye Disease (External and other, but excluding errors of refraction, squint and cases admitted to hospital)	1,346
Ear Defects	2,949
Miscellaneous (e.g., minor injuries, bruises, sores, chilblains, etc.)	12,468
TOTAL	17,856
Total number of attendances at Authority's minor ailments clinics	74,953

GROUP II. DEFECTIVE VISION AND SQUINT

(Excluding Eye Disease treated as Minor Ailments—Group I).

	No. of Defects dealt with.
Errors of Refraction (including squint)	2,452
Other defect or disease of the eyes (excluding those recorded in Group I)	539
TOTAL	<hr/> 2,991 <hr/>
No. of pupils for whom spectacles were (a) Prescribed	1,817
(b) Obtained	<hr/> 1,817 <hr/>

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

	Total number treated.
Received operative treatment—	
(a) for adenoids and chronic tonsillitis	437
(b) for other nose and throat conditions	21
Received other forms of treatment	261
TOTAL	<hr/> 719 <hr/>

GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	Total number treated.
(a) Number treated as in-patients in hospitals or hospital schools	104
(b) Number treated otherwise, e.g., in clinics or out-patients departments	641

GROUP V.—CHILD GUIDANCE TREATMENT AND SPEECH THERAPY.

	Total number treated.
Number of pupils treated—	
(a) under Child Guidance arrangements	220
(b) under Speech Therapy arrangements	159

TABLE IV.

DENTAL INSPECTION AND TREATMENT.

(1)	Number of pupils inspected by the Authority's Dental Officers—	Total number treated.
	(a) Periodic Age Groups	8,328
	(b) Specials	1,210
	(c) TOTAL (Periodic and Specials)	9,538
(2)	Number found to require treatment	6,883
(3)	Number actually treated	8,163
(4)	Attendances made by pupils for treatment	9,764
(5)	Half-days devoted to—	
	(a) Inspection	60
	(b) Treatment	1,473
	TOTAL (a) and (b)	1,533
(6)	Fillings—	
	Permanent Teeth	3,814
	Temporary Teeth	492
	TOTAL	4,306
(7)	Extractions—	
	Permanent Teeth	1,491
	Temporary Teeth	9,084
	TOTAL	10,575
(8)	Administrations of general anæsthetics for extraction ...	5,056
(9)	Other operations—	
	(a) Permanent Teeth	1,969
	(b) Temporary Teeth	644
	TOTAL (a) and (b) ...	2,613

TABLE V.

INFESTATION WITH VERMIN.

(i)	Total number of examinations in the schools by the school nurses or other authorised persons	64,067
(ii)	Total number of individual pupils found to be infested	6,791
(iii)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944) ... ..	...
(iv)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944) ... ..	...

Scabies Surveys, 1944-1949.

Years	Number of Cases			Boys		Girls		Total	Incidence
	Boys	Girls	Total						
1944.....	56	111	167	10,108	0·6%	10,200	1·1%	20,308	0·8%
1945.....	49	75	124	10,142	0·5%	10,402	0·7%	20,544	0·6%
1946.....	20	36	56	10,105	0·2%	10,210	0·4%	20,315	0·3%
1947.....	11	23	34	11,172	0·1%	11,132	0·2%	22,304	0·2%
1948.....	12	19	31	10,018	0·1%	10,152	0·2%	20,170	0·2%
1949.....	12	13	25	11,717	0·1%	11,241	0·1%	22,958	0·1%

Percentage of children with scabies, according to traditional social grouping of schools.

	1944.	1945.	1946.	1947.	1948.	1949.
Good.....	0·6%	0·5%	0·3%	0·2%	0·1%	0·0%
Average.....	0·8%	0·6%	0·3%	0·2%	0·2%	0·1%
Poor	1·0%	0·7%	0·3%	0·1%	0·2%	0·2%
Total	0·8%	0·6%	0·3%	0·2%	0·2%	0·1%
Total children examined...	20,308	20,544	20,315	22,304	20,170	22,958

Details of children who have received treatment at the Speech Clinics during the past year.

At Encombe Place—

Stammerers.....	5
Stammerers with Dyslalia	4
Dyslalia.....	19
Dyslalia and Deaf.....	1
Nasal Speech	1
	—
Total	30
	—

At Langworthy Road—

Stammerers.....	18
Stammerers with Dyslalia	3
Dyslalia.....	17
Word Deaf	1
Nasal Speech	2
	—
Total	41
	—

At Broughton County Secondary School—

Stammerers.....	19
Stammerers with Dyslalia	1
Dyslalia.....	20
Sigmatism.....	2
Cleft Palate	1
Nasal Speech	1
Spastic with Athetosis	2
Total	46

At Regent Road—

Stammerers.....	22
Stammerers with Dyslalia	3
Dyslalia.....	15
Dyslalia with Nasal Speech.....	1
Sigmatism.....	1
Total	42
General Total.....	159

Total number of attendances — 2,518.

Children interviewed and still waiting admission number 33. A further 36 children were also called for interview, but failed to attend.

Cases referred for speech treatment and not yet called for interview total 173. (These include children referred during the year 1948).

Discharges during the Year.

Final discharge—satisfactory.....	26
Provisional discharge—satisfactory (and awaiting final discharge).....	14
Stood down for the time being	1
Discharged because further improvement unlikely	1
Discharged because no improvement likely	2
Discharged owing to failure to attend, or unsatisfactory attendance.....	14
Left Salford area	2
Left school, having shown great improvement	6
Left school, having shown some improvement	1
Total	67

Handicapped Pupils.

	Number of Handicapped Children	Ministry of Education Estimate	Percentage of 26,775
1. Blind	6	0·2 to 0·3 per 1,000	0·2 per 1,000
2. Partially sighted.....	38	1·0 per 1,000	1·4 per 1,000
3. Deaf	21	0·7 to 1·0 per 1,000	0·8 per 1,000
4. Partially deaf.....	92	1·0 upwards per 1,000	3·4 per 1,000
5. Delicate (including Asthma)	471	1 to 2 per cent.	1·8 per cent.
6. Diabetic	8	No estimate	0·3 per cent.
7. Epileptic	51	0·2 per 1,000	1·9 per 1,000
8. Educationally subnormal.....	*297	10 per cent.	1·1 per cent.
9. Maladjusted	39	1·0 per cent.	0·1 per cent.
10. Physically handicapped—			
Various	270	5 to 8 per 1,000	10·8
Cerebral Palsy.....	47		1·8
11. Speech	306	1·5 to 3·0 per cent.	1·1 per cent.
12. Multiple defects	124		0·5 per cent.

During the year eight children were recommended to be notified to the Local Authority as being ineducable.

*The task of the ascertainment of the educationally subnormal child has not been completely accomplished in Salford, and only these children who have come to the notice of the School Health Service as having the more severe degrees of educational subnormality are included in this number.

Foot Survey.
Salford School Children—1949.
Incidence of Defects.

	572 Girls (all ages)		437 Boys (all ages)		1,009 Children (all ages)	
	Slight Defect	Marked Defect	Slight Defect	Marked Defect	Slight Defect	Marked Defect
Weakness of Long Arch.....	161 28·2%	54 9·4%	77 17·6%	28 6·4%	238 23·68%	82 8·1%
Weakness of Met. Arch.....	50 8·7%	12 2·1%	9 2·1%	—	59 5·9%	12 1·2%
Defects of Lesser Toes	107 18·7%	20 3·5%	52 11·9%	16 3·7%	159 15·8%	36 3·5%
Nail Defects	17 3·0%	1 0·2%	3 0·7%	—	20 2·0%	1 0·1%
Hallux Valgus	88 15·4%	24 4·2%	16 3·7%	4 0·9%	104 10·3%	28 2·8%
Verrucæ	7 1·2%	7 1·2%	—	—	7 0·7%	7 0·7%
Corns and Callosities.....	34 5·9%	7 1·2%	10 2·3%	1 0·2%	44 4·4%	8 0·8%
Number of children with no Physical Defects	{ 259 45·3%		{ 262 60·0%		{ 521 51·6%	

Chiropody, 1949.

The number of attendances at the Chiropody Clinics for the year 1949 was 2,580, a very substantial increase over the 1948 figure which was 1,187.

Analysis of the recording of patients during 1949, show the following percentages :—

	1949	Cases	1948	1947
Pronation	22·5%	155	—	12·0%
Defects of Lesser Toes	18·5%	128	9·8%	—
Hallux Valgus	11·0%	76	5·6%	—
Verrucae	20·4%	141	27·2%	46·0%
Corns and Callosities	11·4%	79	11·6%	22·0%
Bunions	0·6%	4	0·9%	—
Nail Defects	4·9%	34	9·7%	6·0%
Metatarsalgia	2·6%	18	2·2%	—
Chilblains	0·6%	4	0·7%	1·0%
Other Defects	4·9%	34	22·2%	9·5%
Referred to Orthopædic Surgeon	2·6%	18	3·0%	3·5%
Defects of Medial Arch	—	—	6·2%	—
Talipes Various	—	—	0·5%	—
Other Congenital Defects	—	—	0·4%	—

A special laboratory has been opened at Hope Hospital for the manufacture of corrective surgical insoles. We have already referred 162 cases for the making and fitting of these insoles. Casts have already been taken of 72 cases and the majority fitted. We still have a waiting list of 90 children.